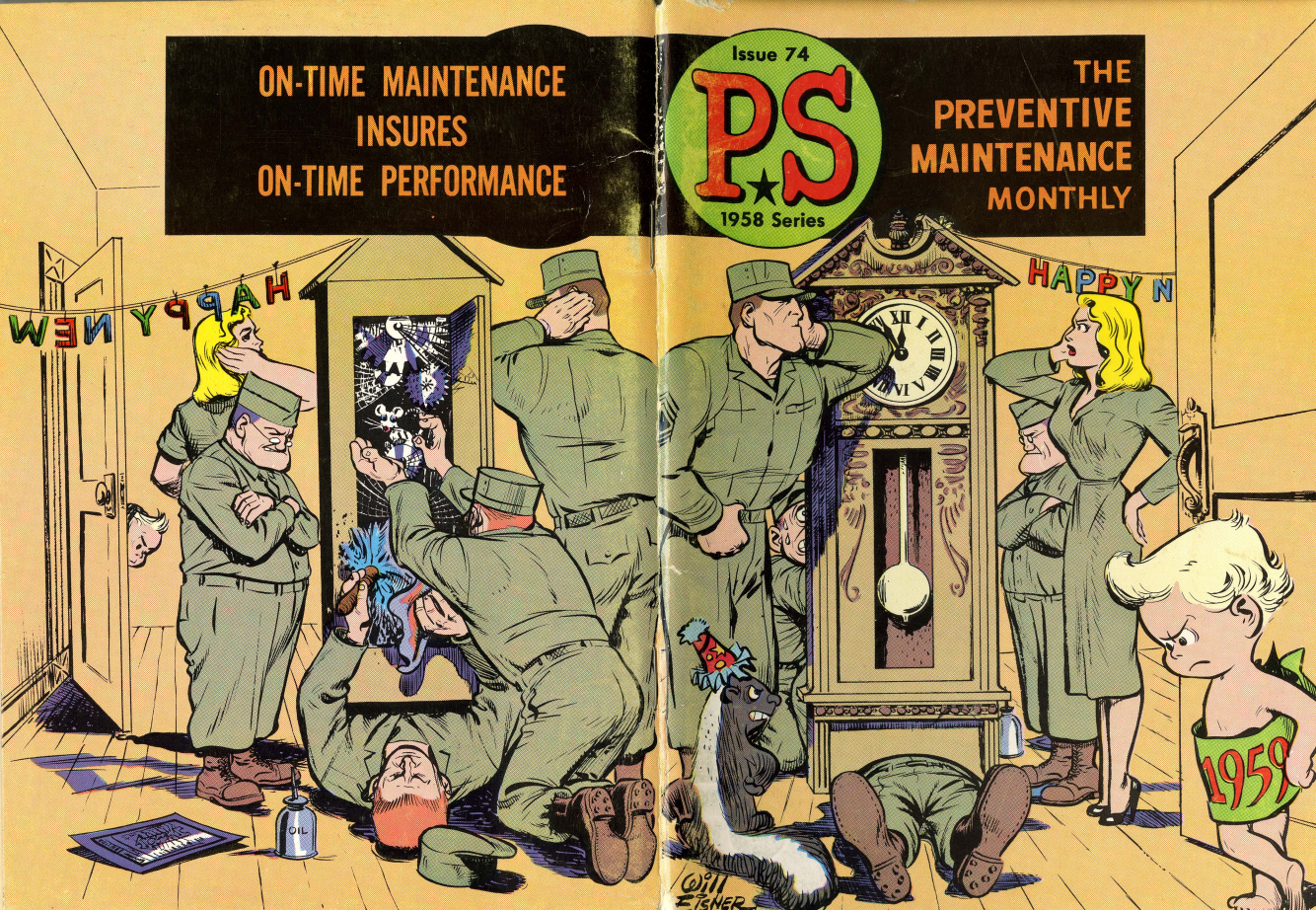
Issue 74
PS
1958 Series
THE PREVENTIVE MAINTENANCE MONTHLY
HAPPY N
1959
Will Eisner


ON-TIME MAINTENANCE
INSURES
ON-TIME PERFORMANCE
Issue 74
P.S
1958 Series
THE
PREVENTIVE
MAINTENANCE
MONTHLY
HAPPY NEW
HAPPY N
1959
OIL
WILL
EISNER

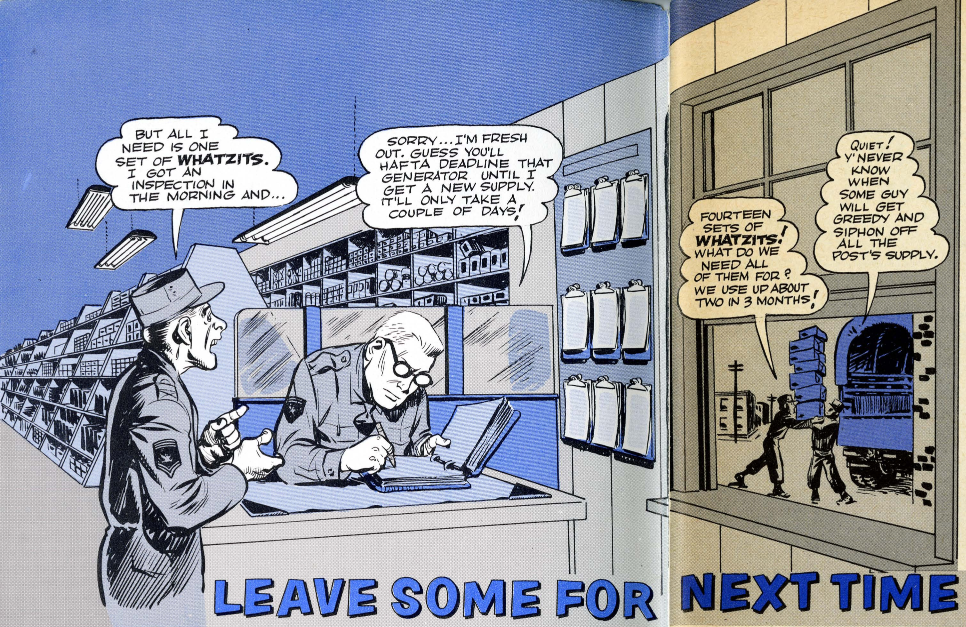
# LEAVE SOME FOR

**IF** you happen to be at a post that allows you to draw a lot of your repair parts from a supermarket type of supply operation, never bite the hand that feeds you.

Sure—nobody's going to stop you from taking twice as many as you know you need. But a few more people behind you do the same thing and, first thing you know, the guy on the end is facing an empty shelf. Among other things he may be thinking about is that truck back at the unit deadlined for want of a set of whatzits.

Of course, the people running the store can throw some more on the shelf—after the next trip to the warehouse. You're not hurting them any . . . just the guy at the end of the line—**and** yourself.

The guy coming after you has to stand around and wait until somebody can run over to the warehouse for more whatzits. Or else he can spend half the day




# LEAVE SOME FOR NEXT TIME

**IF** you happen to be at a post that allows you to draw a lot of your repair parts from a supermarket type of supply operation, never bite the hand that feeds you.

Sure—nobody's going to stop you from taking twice as many as you know you need. But a few more people behind you do the same thing and, first thing you know, the guy on the end is facing an empty shelf. Among other things he may be thinking about is that truck back at the unit deadlined for want of a set of whatzits.

Of course, the people running the store can throw some more on the shelf —after the next trip to the warehouse. You're not hurting them any . . . just the guy at the end of the line—**and** yourself.

The guy coming after you has to stand around and wait until somebody can run over to the warehouse for more whatzits. Or else he can spend half the day running around to other outfits trying to borrow what he needs.

Meanwhile, you got an overstock of repair parts, which the inspector won't like when he comes a-visitin'.

Besides, you used up some of your money credits for stuff you can get from the supermarket any time you want. And those money credits get kinda short sometimes—just like your own cash the week before payday.

So, there's no point in overdoing a good thing.

**PS** THE PREVENTIVE MAINTENANCE MONTHLY

Issue No. 74 — 1958 Series

**Published by the Department of the Army for the information of organizational maintenance and supply personnel.** Distribution is made through normal publication channels. Within limits of availability, older issues may be obtained direct from Preventive Maintenance Agency, Raritan Arsenal, Metuchen, New Jersey.

## IN THIS ISSUE

### EQUIPMENT

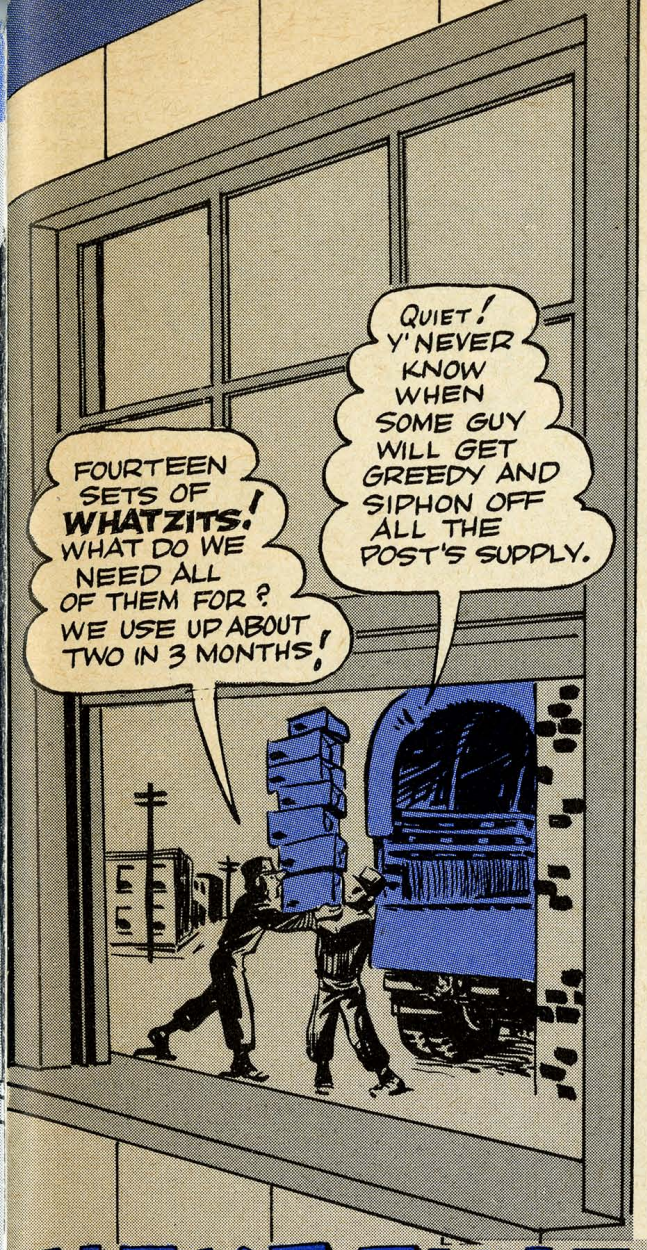
| | |
|---|---|
| Cut Your Supply Paperwork | 2 |
| Wheeled Vehicles | 18, 19, 37, 38 41, 63, 64 |
| Missiles | 19 |
| Tracked Vehicles | 20, 62 |
| Gasoline Lantern | 22 |
| Protective Mask | 24 |
| Tent Stove, M1941 | 25 |
| M59 APC | 26 |
| Army Aircraft | 42 |
| Radios, TRC-47 and GRC-19 | 48, 49 |
| SB-22/PT Switchboard | 48 |
| T-368 Radio Transmitter | 50 |
| SCSLR | 50 |
| 210 Air Compressor | 52-61 |

### DEPARTMENTS

| | |
|---|---|
| Connie Rodd | 18 |
| Question and Answer | 37 |
| Contributions | 62 |
| Connie Rodd's Briefs | 65 |

PS wants your ideas and contributions, and is glad to answer your questions. Just write to: **Sgt Half-Mast, PS, Raritan Arsenal, Metuchen, New Jersey.** Names and addresses are kept in confidence.

The printing of this publication has been approved by the Director of the Bureau of the Budget (27 Apr 56). DISTRIBUTION: Active Army; DCSPER (2); ACSI (1); DCSOPS (1); DCSLOG (10); ACSRC (1); CAMG (1); CoA (1); CUSARROTC (1); CofF (1); CINFO (1); TIG (1); TJAG (1); CLL (1); CMH (1); CNGB (1); Dir of SpWarfare (1); Technical Stf, DA (5); except CofEngrs (75), CofOrd (275), TQMG (25); Chaplain Bd (5); CAMG Bd, (5); TAG Bd, USA (5); USA Intl Bd (5); Technical Stf Bd (5); USCONARC (10); OS Maj Comd (5); MDW (5); Armies (50); Corps (3); Div (2); except Armor Div (100); Brig (3); Regt/Gp (3); Bn (5); Co/Btry (15) except Med Co (5); Ft & Camps (6); Svc Colleges (5); Br Svc Sch (5) except USAES (100), USA Ord Sch (25), USA QM Sch (25); USMA (25); Joint Sch (5); Specialist Sch (5); PMST Sr Div Units (3) except PMST Sr Div Ord Units (25); PMST Jr Div Units (3); PMST Mil Sch Div Units (3); Gen Depots (5); Sup Sec. Gen Depots (5); Depots (5); Ord Tk Autmv Comd (100); AH (5); USATC (100); Fld Comd, AFSWP (10); Ports of Emb (OS) (3); Trans Terminal Comd (3); Army Terminals (3); OS Sup Agcy (2); PG (5); Arsenals (25); CmlCMatCom (25); DB (25); Engr Maint Cen (270); RMS (3); Div Engr (2), except New England Div Engr (20); Engr Dist (10); NG: State AG Special List. USAR: Mil Dist Special List. For explanation of abbreviations used, see AR 320-50.




# NEXT TIME

running around to other outfits trying to borrow what he needs.

Meanwhile, you got an overstock of repair parts, which the inspector won't like when he comes a-visitin'.

Besides, you used up some of your money credits for stuff you can get from the supermarket any time you want. And those money credits get kinda short sometimes—just like your own cash the week before payday.

So, there's no point in overdoing a good thing.


# PS THE PREVENTIVE MAINTENANCE MONTHLY

**Issue No. 74** **1958 Series**

**Published by the Department of the Army for the information of organizational maintenance and supply personnel.** Distribution is made through normal publication channels. Within limits of availability, older issues may be obtained direct from Preventive Maintenance Agency, Raritan Arsenal, Metuchen, New Jersey.


## IN THIS ISSUE

### EQUIPMENT


| | |
|---|---|
| Cut Your Supply Paperwork | 2 |
| Wheeled Vehicles | 18, 19, 37, 38 41, 63, 64 |
| Missiles | 19 |
| Tracked Vehicles | 20, 62 |
| Gasoline Lantern | 22 |
| Protective Mask | 24 |
| Tent Stove, M1941 | 25 |
| M59 APC | 26 |
| Army Aircraft | 42 |
| Radios, TRC-47 and GRC-19 | 48, 49 |
| SB-22/PT Switchboard | 48 |
| T-368 Radio Transmitter | 50 |
| SCSLR | 50 |
| 210 Air Compressor | 52-61 |


### DEPARTMENTS


| | |
|---|---|
| Connie Rodd | 18 |
| Question and Answer | 37 |
| Contributions | 62 |
| Connie Rodd's Briefs | 65 |


PS wants your ideas and contributions, and is glad to answer your questions. Just write to: **Sgt Half-Mast, PS, Raritan Arsenal, Metuchen, New Jersey.** Names and addresses are kept in confidence.


The printing of this publication has been approved by the Director of the Bureau of the Budget (27 Apr 56). DISTRIBUTION: Active Army: DCSPER (2); ACSI (1); DCSOPS (1); DCSLOG (10); ACSRC (1); CAMG (1); CoA (1); CUSARROTC (1); CofF (1); CINFO (1); TIG (1); TJAG (1); CLL (1); CMH (1); CNGB (1); Dir of SpWarfare (1); Technical Stf, DA (5); except CofEngrs (75), CofOrd (275), TQMG (25); Chaplain Bd (5); CAMG Bd, (5); TAG Bd, USA (5); USA Intl Bd (5); Technical Stf Bd (5); USCONARC (10); OS Maj Comd (5); MDW (5); Armies (50); Corps (3); Div (2); except Armor Div (100); Brig (3); Regt/Gp (3); Bn (5); Co/Btry (15) except Med Co (5); Ft & Camps (6); Svc Colleges (5); Br Svc Sch (5) except USAES (100), USA Ord Sch (25), USA QM Sch (25); USMA (25); Joint Sch (5); Specialist Sch (5); PMST Sr Div Units (3) except PMST Sr Div Ord Units (25); PMST Jr Div Units (3); PMST Mil Sch Div Units (3); Gen Depots (5); Sup Sec. Gen Depots (5); Depots (5); Ord Tk Autmv Comd (100); AH (5); USATC (100); Fld Comd, AFSWP (10); Ports of Emb (OS) (3); Trans Terminal Comd (3); Army Terminals (3); OS Sup Agcy (2); PG (5); Arsenals (25); CmlCMatCom (25); DB (25); Engr Maint Cen (270); RMS (3); Div Engr (2), except New England Div Engr (20); Engr Dist (10); NG: State AG Special List. USAR: Mil Dist Special List. For explanation of abbreviations used, see AR 320-50.

## AR 735-35 TELLS THE STORY OF SUPPLY IN A NEW WAY.

A few new rules have been tossed into the supply game these days. Like a souped-up car starting off in second, you can now push orders and turn-ins through the supply system faster, with less paperwork.

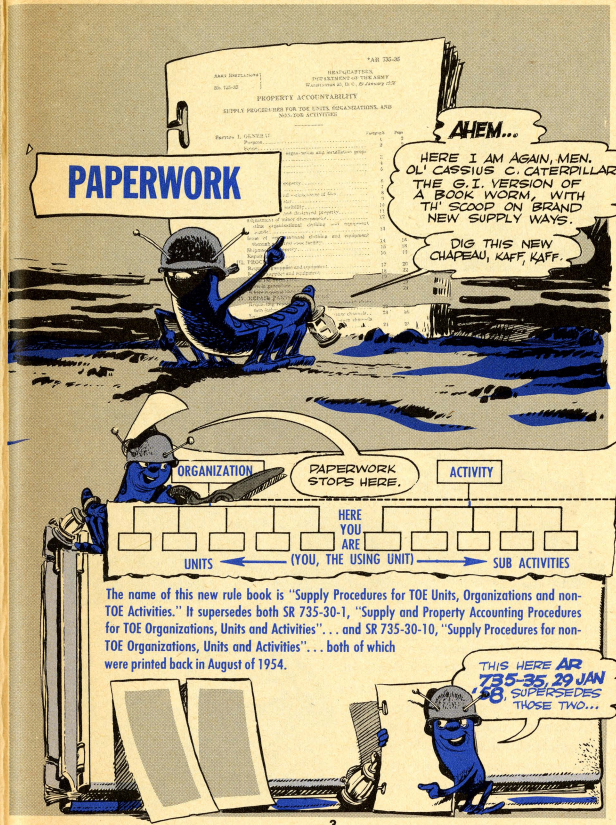
The new using unit, organization and activity supply guide is AR 735-35 (29 Jan 58)—and it lays down policy for a system that sounds like sweet music to a supply man's ear. Basically, it allows you to cut your paperwork by centralizing the record-keeping.

## AR 735-35 TELLS THE STORY OF SUPPLY IN A NEW WAY.

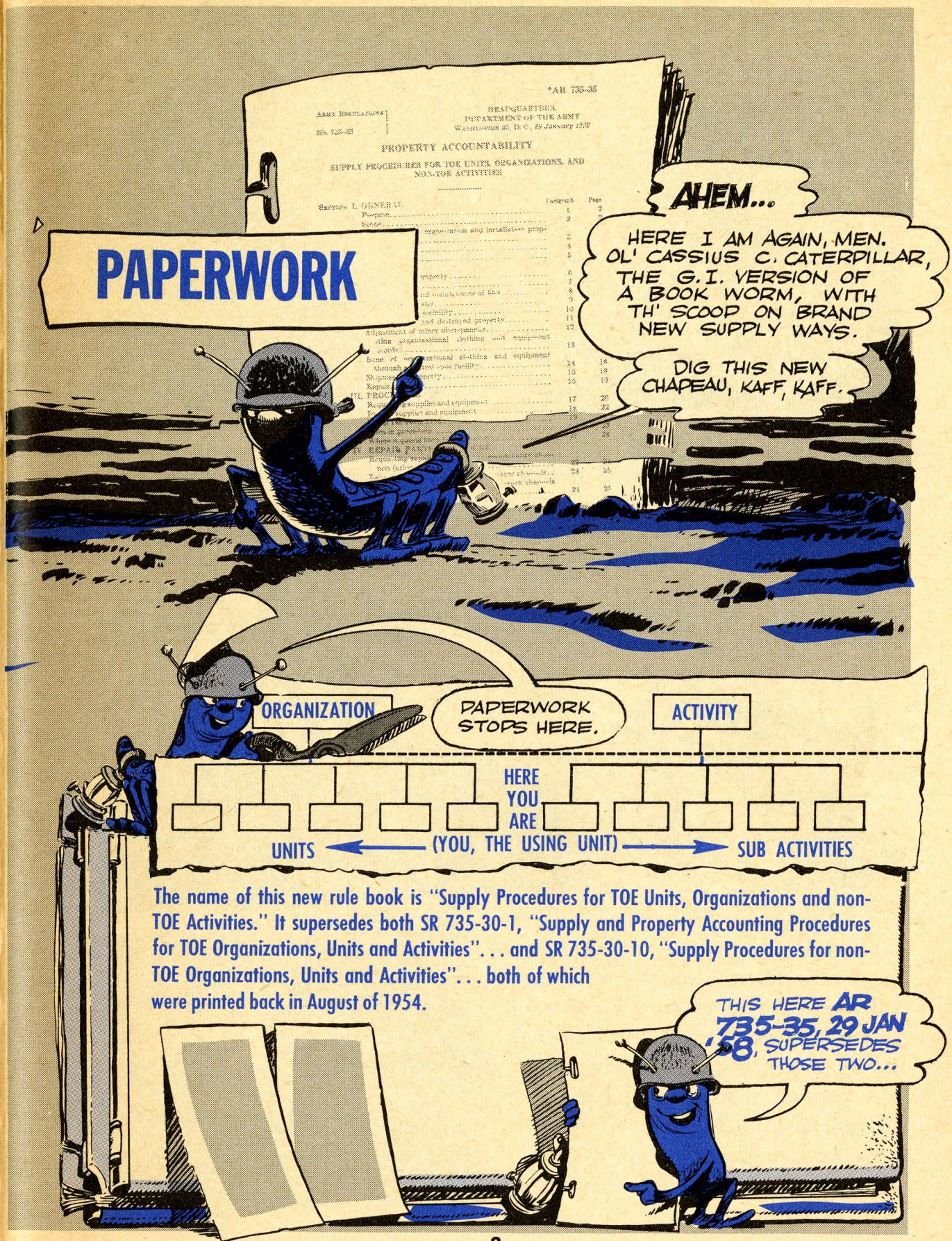
A few new rules have been tossed into the supply game these days. Like a souped-up car starting off in second, you can now push orders and turn-ins through the supply system faster, with less paperwork.

The new using unit, organization and activity supply guide is AR 735-35 (29 Jan 58)—and it lays down policy for a system that sounds like sweet music to a supply man's ear. Basically, it allows you to cut your paperwork by centralizing the record-keeping.

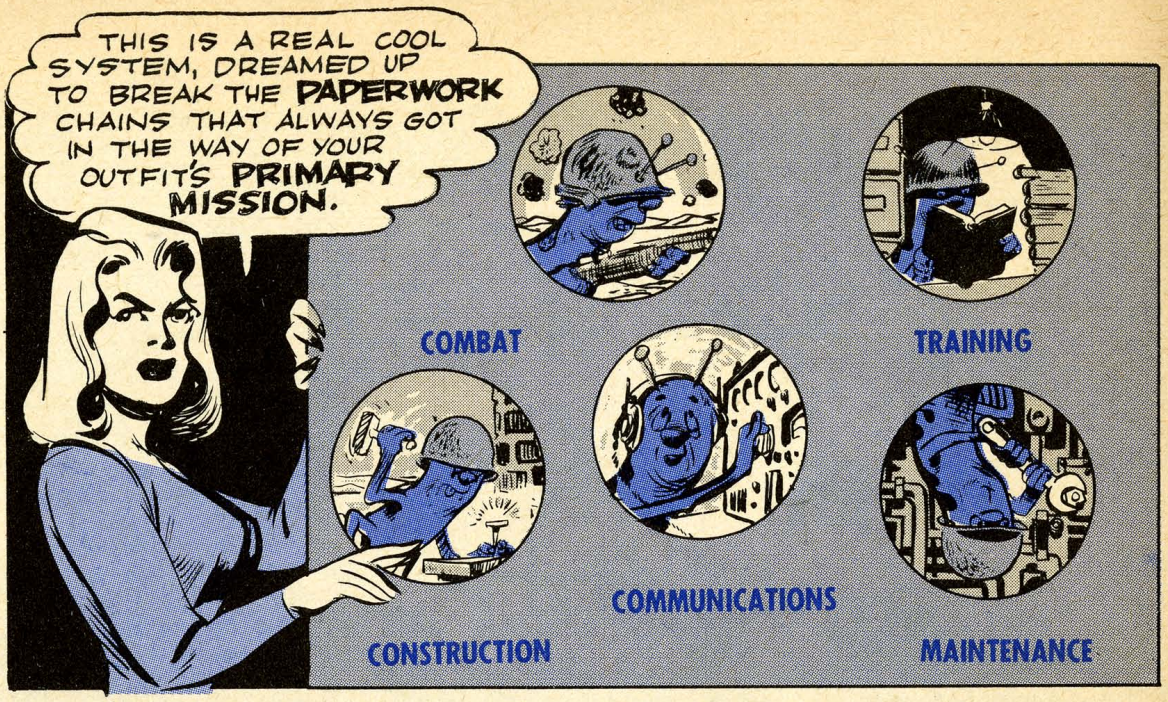





The name of this new rule book is "Supply Procedures for TOE Units, Organizations and non-TOE Activities." It supersedes both SR 735-30-1, "Supply and Property Accounting Procedures for TOE Organizations, Units and Activities"... and SR 735-30-10, "Supply Procedures for non-TOE Organizations, Units and Activities"... both of which were printed back in August of 1954.

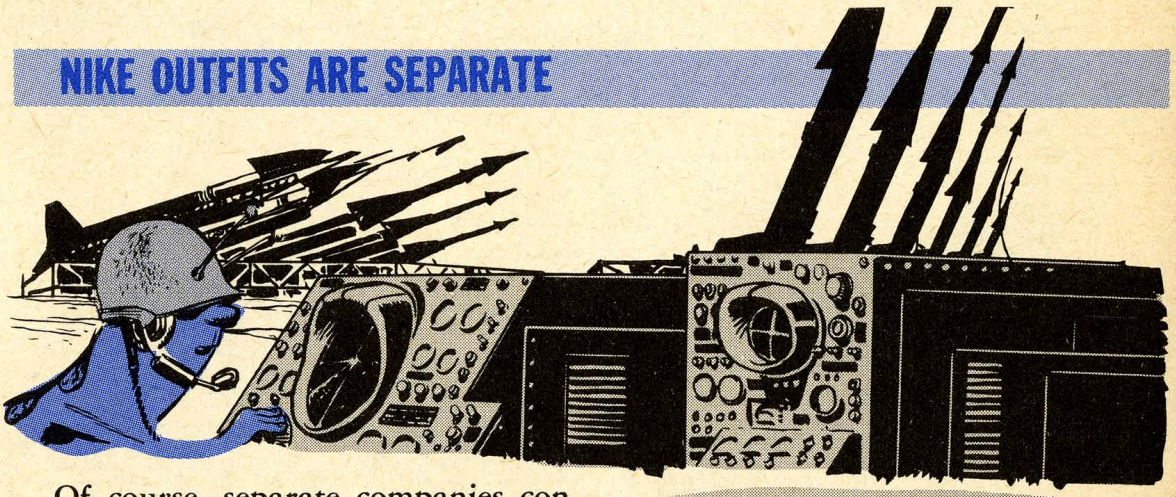



The name of this new rule book is "Supply Procedures for TOE Units, Organizations and non-TOE Activities." It supersedes both SR 735-30-1, "Supply and Property Accounting Procedures for TOE Organizations, Units and Activities"... and SR 735-30-10, "Supply Procedures for non-TOE Organizations, Units and Activities"... both of which were printed back in August of 1954.

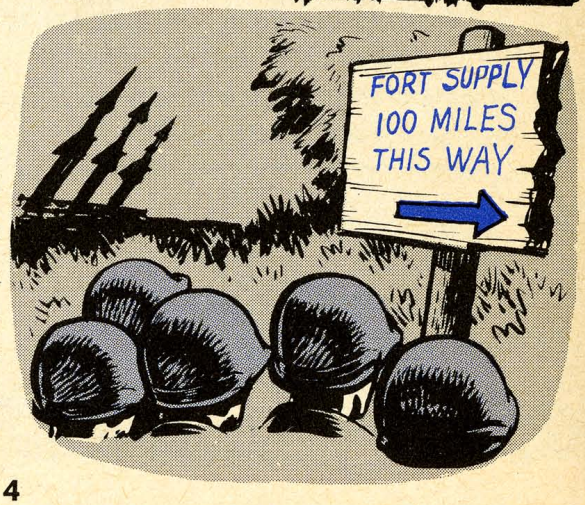



The whole idea is to move all the paperwork and stocking of supplies out of the hands of company and battery-size units, letting everything begin at the property book level—or the lowest command echelon that has a PBO (property book officer)—whether it's battalion, group, regiment, branch or department level.

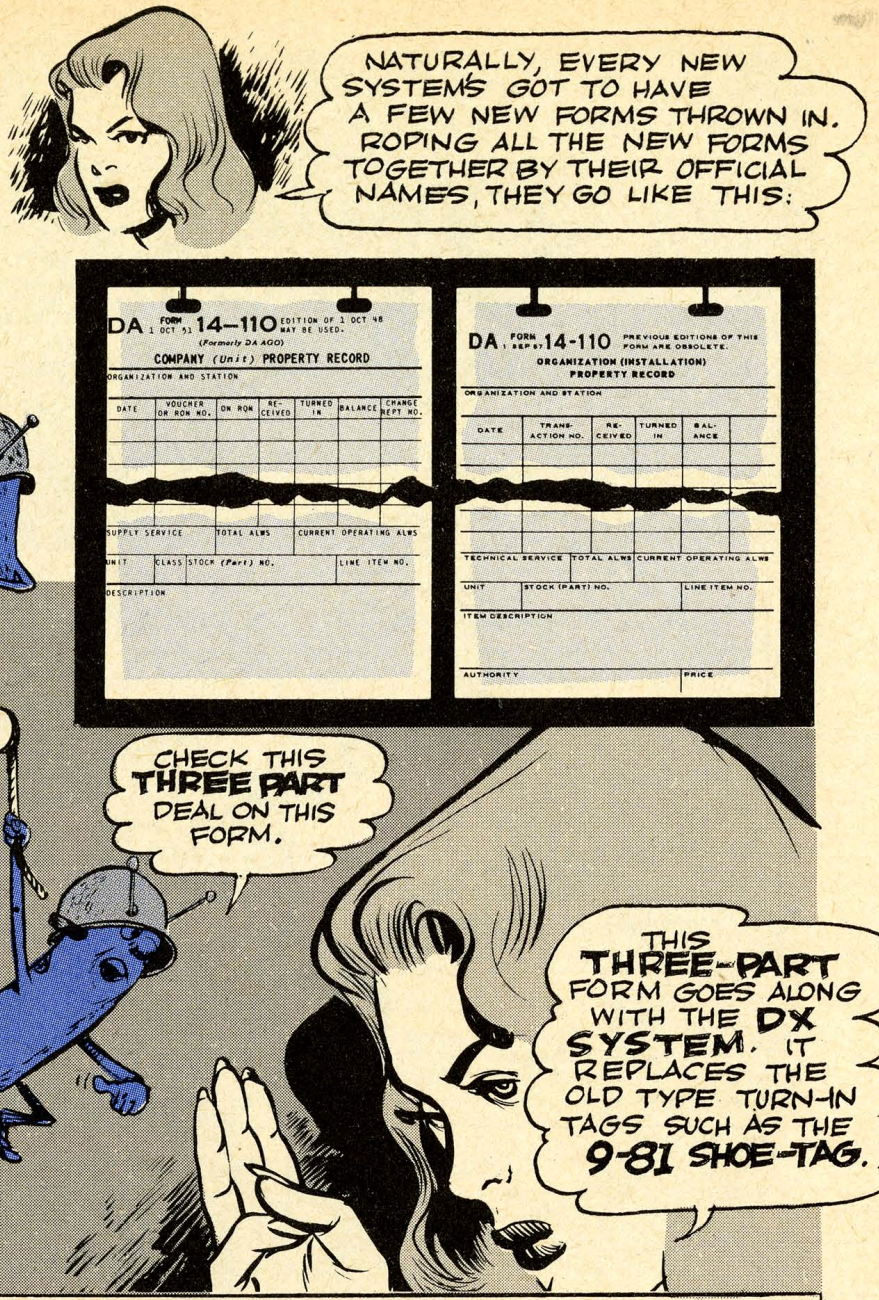
## NIKE OUTFITS ARE SEPARATE

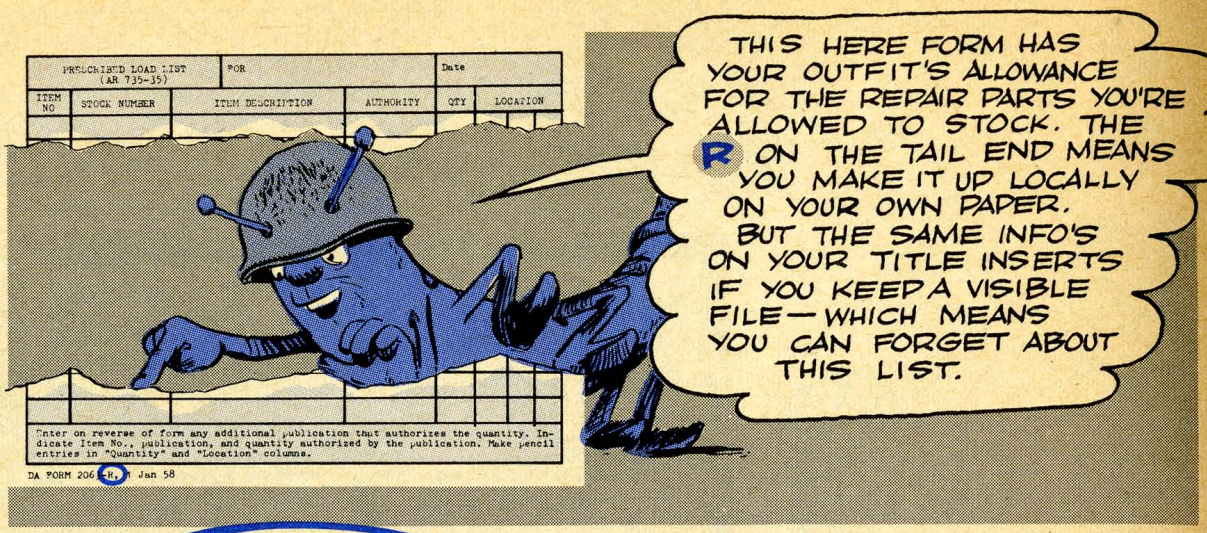


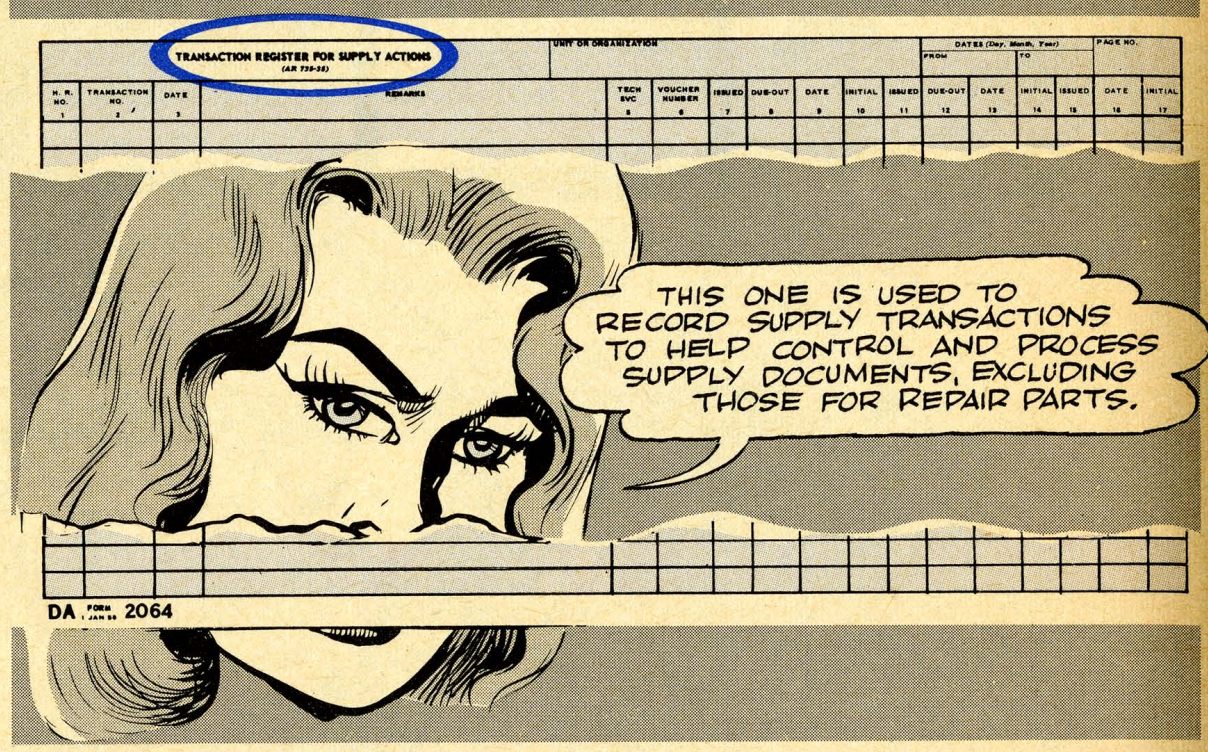
Of course, separate companies continue to do their own ordering, file keeping and stocking of parts. For instance, **all you AAA batteries located on a site** are considered separate companies as far as supply people are concerned. But if a separate company is **attached** to an organization for support, the organization becomes responsible for the paperwork—leaving the company free to concentrate on its mission.



# NEW FORMS

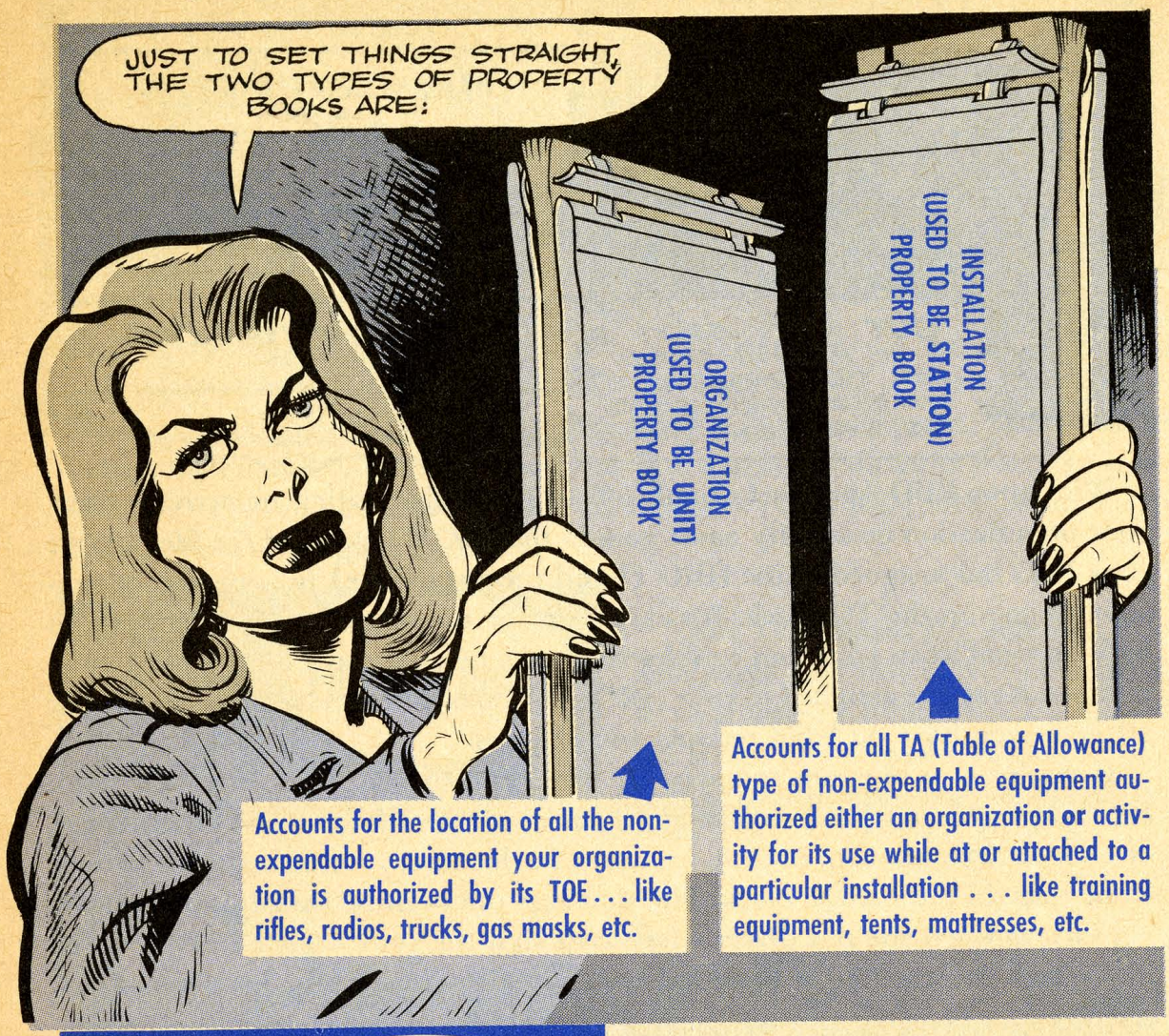

NATURALLY, EVERY NEW SYSTEM'S GOT TO HAVE A FEW NEW FORMS THROWN IN. ROPING ALL THE NEW FORMS TOGETHER BY THEIR OFFICIAL NAMES, THEY GO LIKE THIS:
DA FORM 1 OCT 51 14-110 EDITION OF 1 OCT 48 MAY BE USED. (Formerly DA AGO)
COMPANY (Unit) PROPERTY RECORD
ORGANIZATION AND STATION
DATE
VOUCHER OR RON NO.
ON RON
RECEIVED
TURNED IN
BALANCE
CHANGE REPT NO.
SUPPLY SERVICE
TOTAL ALWS
CURRENT OPERATING ALWS
UNIT
CLASS STOCK (Part) NO.
LINE ITEM NO.
DESCRIPTION
DA FORM 1 SEP 57 14-110 PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.
ORGANIZATION (INSTALLATION) PROPERTY RECORD
ORGANIZATION AND STATION
DATE
TRANSACTION NO.
RECEIVED
TURNED IN
BALANCE
TECHNICAL SERVICE
TOTAL ALWS
CURRENT OPERATING ALWS
UNIT
STOCK (PART) NO.
LINE ITEM NO.
ITEM DESCRIPTION
AUTHORITY
PRICE
DA FORM 1115 1 DEC 57 REPLACES EDITION OF 1 JUN 54.
PROPERTY TURN-IN TAG (AR 711-16)
1. TECHNICAL SERVICE
2. DATE
3. UNIT OR ORG
4. STOCK NUMBER
5. ITEM NAME
6. EXCHANGE
7. REPAIR
8. TURN-IN
9. NAME & MANUFACTURER
END ITEM IDENT
10. MODEL
11. SER NO.
12. UNIT OR ORG
13. STOCK NO.
14. ITEM NAME
15. UNIT OR ORG
16. STOCK NO.
17. ITEM NAME
CHECK THIS THREE PART DEAL ON THIS FORM.
THIS THREE-PART FORM GOES ALONG WITH THE DX SYSTEM. IT REPLACES THE OLD TYPE TURN-IN TAGS SUCH AS THE 9-81 SHOE-TAG.
HAND RECEIPT/ANNEX NO. (AR 735-35)
FROM:
TO:
Hand Receipt File No.
Following last item, state in each balance column the type of action (e.g. issue, turn-in, inventory, etc.) producing this balance, date of action, and signature.
Fill in the following when this form is used as Hand Receipt Annex.
CATALOG NO.
CURR OP ALW
ITEM
STOCK NO.
ITEM DESCRIPTION
T1 (a)
C2 (l)
BALANCE
1 2 3 4 5 6 7 8 9 10 11 12
1T – Total allowance for Hand Receipts. (a) – Authorized per item for Hand Receipt Annexes.
2C – Current operating allowance for Hand Receipts. (l) – Total authorized for Hand Receipt Annexes.
NO. OF PAGES
DA FORM 1 JAN 56 2062
THIS COVERS ALL PROPERTY BOOK ITEMS LOANED OUT TO PEOPLE IN THE ORGANIZATION OR ACTIVITY.



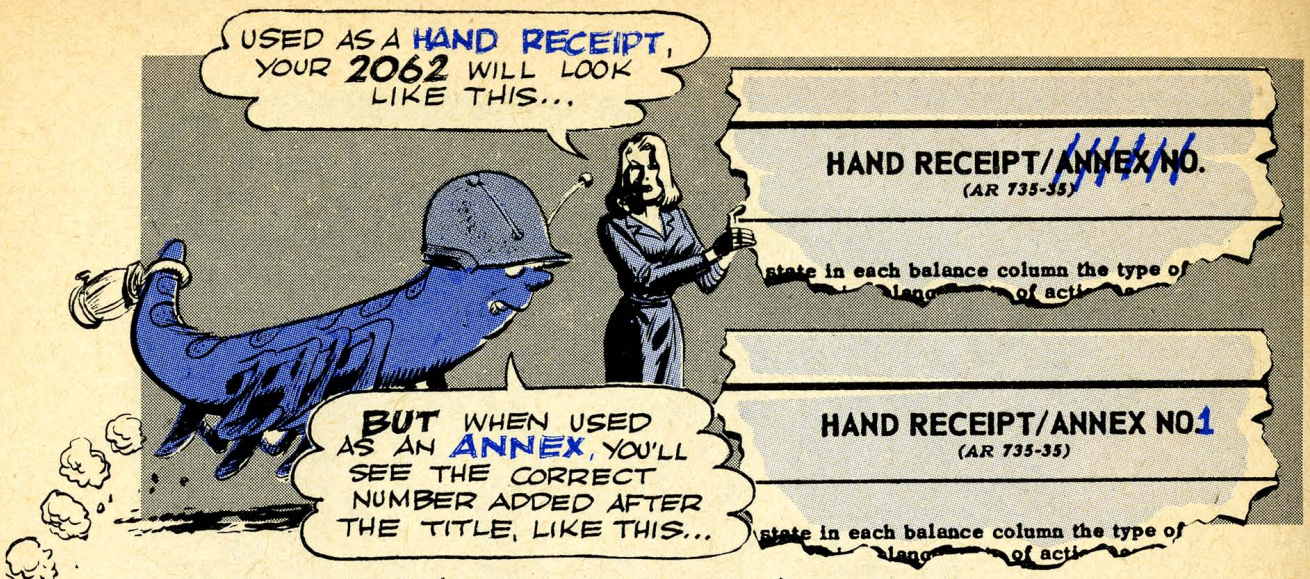
Since the system works almost the same for both TOE and non-TOE people, it's not too important what kind of outfit you're in . . . but, it sure helps to cut down on the confusion if we take a minute to be sure we're putting the right names with the right types of outfits.

For you people who operate under a TOE (Table of Organization and Equipment), every **organization** is made up of smaller **units** . . . like a battalion in relation to its line companies or batteries. But every **activity**, which is the name for you non-TOE outfits, has only **subactivities** . . . like the departments of a school —the branches or departments of a depot or special shop.



Two of the new forms you want to get acquainted with are for use with the non-expendable end items that go in your property books at the property book officer level. Every time a piece of equipment gets loaned out to one of the units or individuals in your organization, or a subactivity or individual in your activity, it goes out on the DA Form 2062.

That DA Form 2062, by the way, is a two-purpose deal. It can be used as a plain hand receipt—or it can be used as an annex to a hand receipt if there're components of an end item that have to be listed. That annex is like a packing list for a tool set, OVM, MWO kits, etc. This form also helps in taking inventories and telling your organization what has to be reordered.

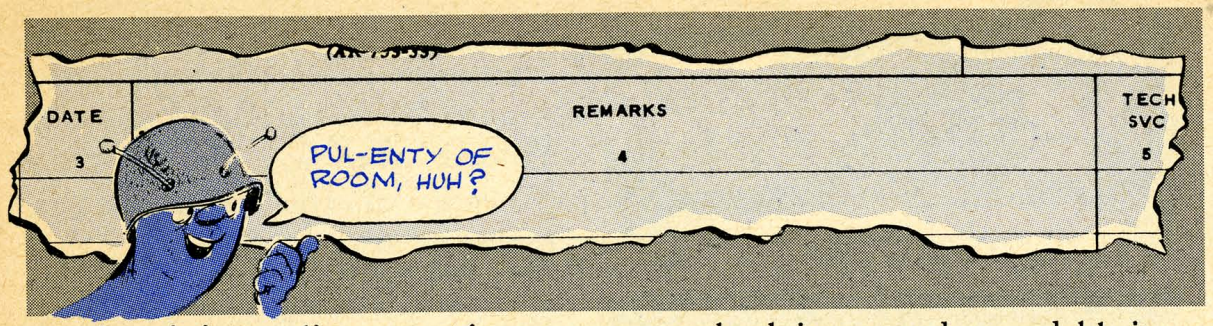



With your **PBO (property book officer)** at organization or activity level, your organization or activity name goes in the FROM block and the file number your PBO has assigned to the **HRO (hand receipt officer)** in your unit or subactivity goes in the TO block. It's easy then for the organization or activity to look up what items your unit or subactivity has by going to a file with the same number as the one assigned to your HRO. This makes your HRO responsible for all items you have on hand receipts and annexes.

If you're in a separate company or battery, then you have your own PBO. So, he can give out hand receipt file numbers to the officer or NCO in charge of each section, platoon, branch, area, etc. In this case, your company or battery name goes in the FROM block. File numbers can even be issued to individuals . . . such as when you're a driver who has to sign for your vehicle's OVM . . . or if you're a construction man or mechanic who has to sign for your own tools.

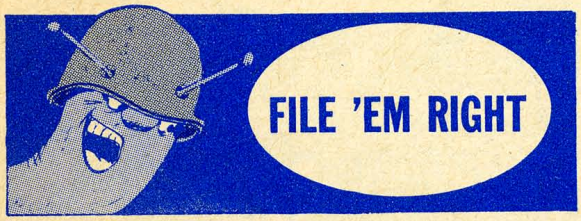
You know that when you're dealing with whole pieces of equipment your outfit's expected to return after their usefulness is finished—you've got to have each of these items marked down in your property book. Since these end items wear out and break down, just like the repair parts you fix them with, there's always a need to order replacements . . . and that means getting involved in supply transactions.

A Transaction Register gives you a quick look on how the battalion stands on orders, turn-ins, due-outs. With that extra-wide REMARKS column, you've got room to identify the end item that transaction number covers with a brief description of the item. Don't forget this

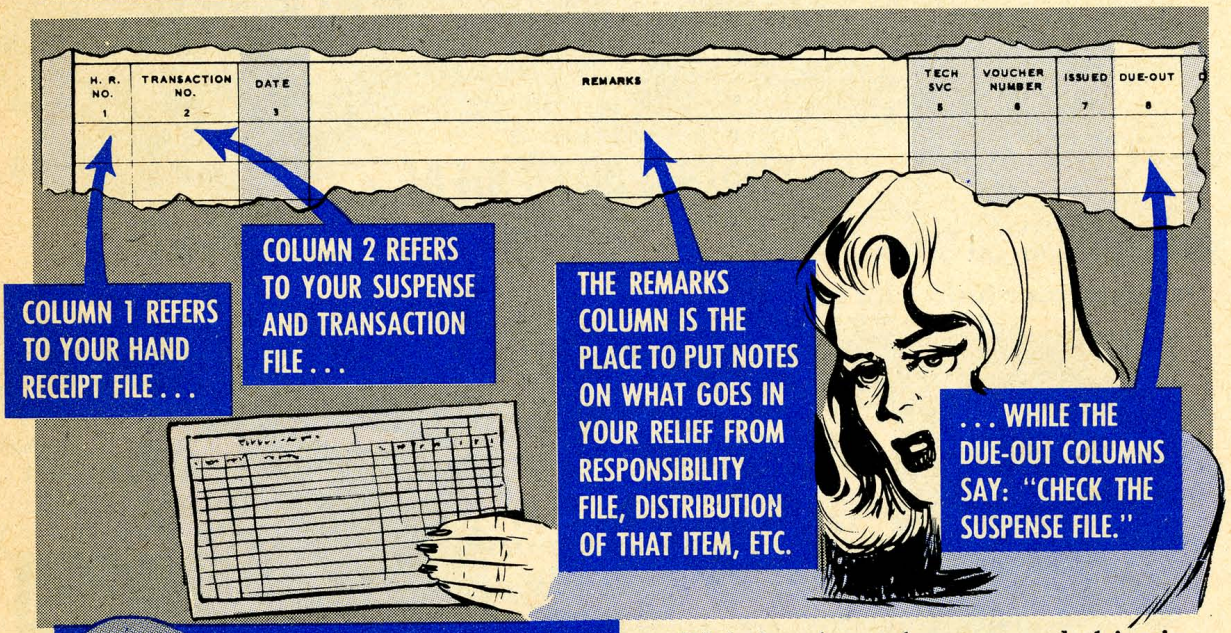



register is just to list transactions on property book items—and expendable items that are **not** repair parts.

If more than one unit or subactivity has orders in for the same item, your organization or activity PBO's people can just list each outfit separately by hand receipt file number in Column 1 and use ditto marks in Column 2 when the same item's been issued under one transaction number . . . the REMARKS column can tell you how many go to each one.




Your Transaction Register won't do your organization or activity much good if your outfit's filing system's messed up. Here's how you do it right—



This is where the returned shipping (blue—No. 1) copies of the 1546 go, along with any other forms needed to back up what the property books say. It's the same as a completed action file for non-expendable end items.

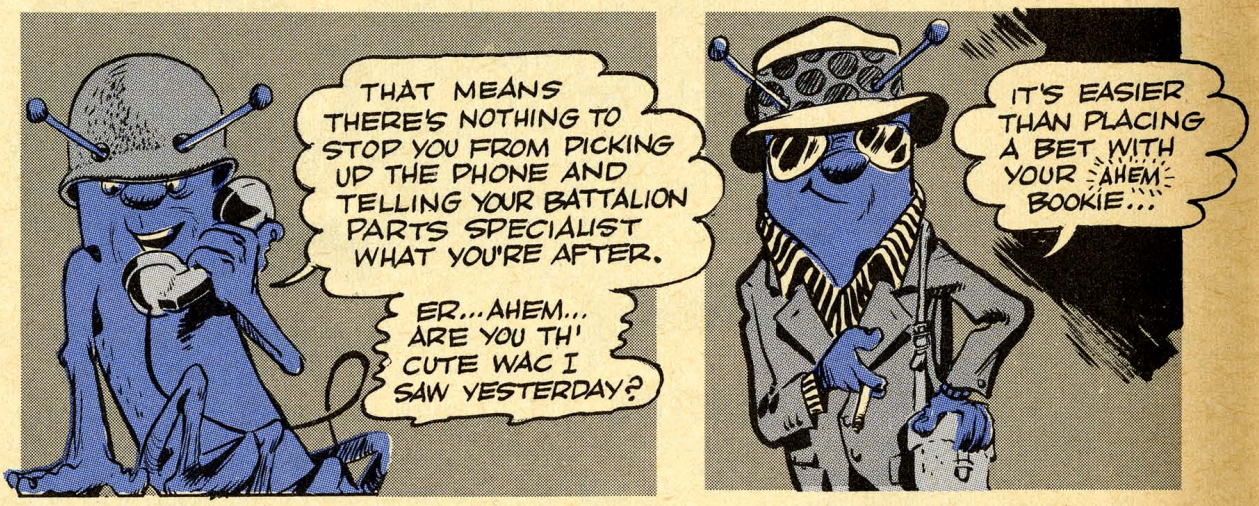
Everything should be filed according to the transaction number on the register. A box, tray, folders—or anything else at hand—can be used to set up these files.

Here's where the unfinished business sits, until the transaction or action is completed. Then you can move the paperwork over to the Transaction File, except on expendable items . . .like housekeeping or office supplies.

Here's where your property book officer keeps an extra copy of each form made out to cover a discrepancy in the records or an actual loss of organizational or activity property. Another copy of these forms also goes in the Transaction File, in order to back up notes in the property books. The actual forms that go in this file are:

## REPAIR PARTS DEAL

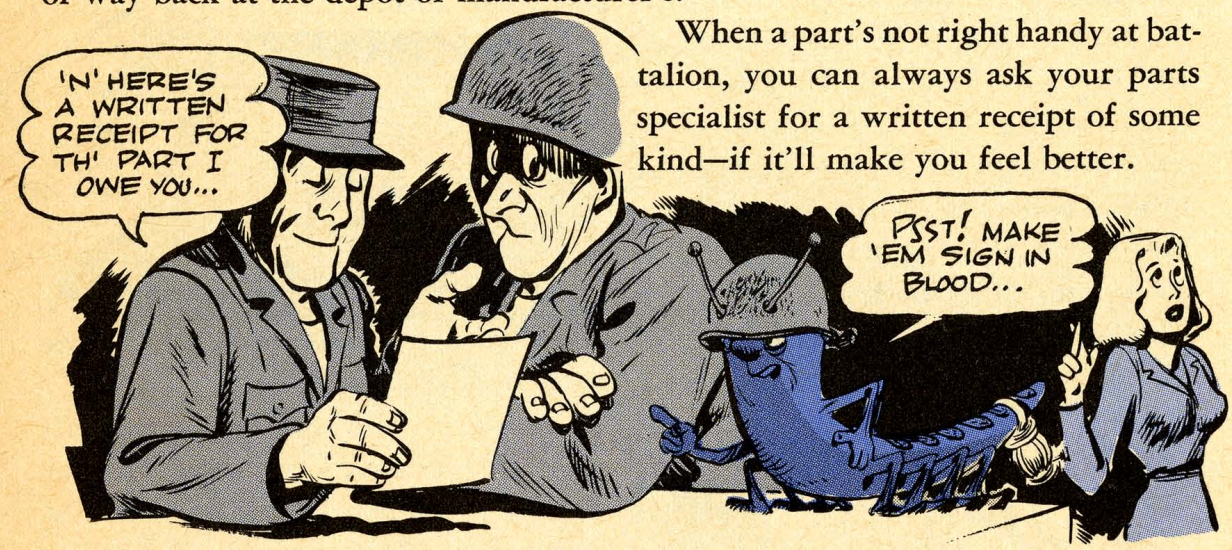
Once you get below property-book level, the AR doesn't pin you down on how to place your orders for end items . . . same goes for parts.




If it'll make you happier, you can use paperwork—like the old DA Form 9-79 (Parts Requisition), for example. But, if it's a record of your requests you want, any other scrap of paper will do just as well.

As far as the Parts Requisition form goes, it was never made official by any Army directive, even though it carries a DA number. This means you can do what you like about using it.

Of course, you can always look at it this way . . . **the Army's giving you a break by wiping out the requirement that organic and attached companies and batteries keep supply records.** So, why not take advantage of the new system? Besides, if you keep your demands for parts coming in regularly, the supply system will be expecting the same rate of demands for the future. Then, supply people can do a better job of planning ahead, so that you hardly ever get a due-out . . . and most times a replacement is waiting for you at battalion level, instead of way back at the depot or manufacturer's.




When a part's not right handy at battalion, you can always ask your parts specialist for a written receipt of some kind—if it'll make you feel better.

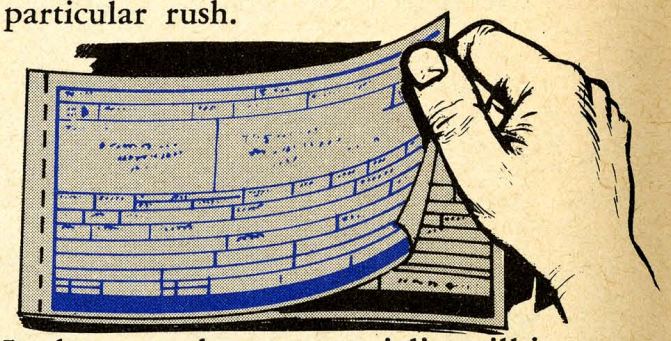
## LEAVE THE STOCKING TO BATTALION

Unless you're in an unattached separate company or battery, you don't want to be worried over stocking your own repair parts. Although the AR doesn't say so, an organization operates a lot better with all its stock of parts in one place—which should be the organization or activity parts room run by the parts specialist. This way, you've got a quick check on all the repair parts in your own battalion. This also saves you the trouble of pulling a man off some other duty in order to make him a part-time parts man.

## FOLLOW THE 1546

The best way to get the feel of this system is to tag along with a DA Form 1546 on its way up and down through channels. Say you want to order a crafinac for your blitzmower . . . and say you're the blitzmower mechanic for Q Company.

You meander over to your shop foreman or maintenance sergeant, depending what kind of outfit you're in, and tell him your troubles. Without batting an eyelash he picks up the telephone, TP-6-A, and dials the battalion parts specialist. Since every organization or activity doesn't have a parts specialist for all kinds of items—like maybe Chemical or Quartermaster items—he may want to call on a parts clerk or someone else at battalion. Instead of using the phone, he might also want to make a note of what you need on a scrap of paper to help him remember the next time he goes up to battalion . . . that's when there's no particular rush.



The battalion parts specialist makes out the 1546—keeps the Unit Suspense Copy (brown—No. 4)—sends the other six copies forward to the tech service supply point in charge of crafinacs. Meanwhile, if he's got a crafinac on the parts room shelf, you'll get it right then and there, before he makes out the 1546. In that case, the parts specialist will just put the replacement crafinac from tech service on his own shelf.

Supposin' the tech service supply point doesn't have a crafinac handy (although you'll usually find some at most every post)? Those people will then tear out the Due-Out Copy (red—No. 3) and send it back to battalion. You don't worry about that due-out down at unit or subactivity level, except to bite your nails and gaze at your kaput blitzmower—'cause your organization or activity parts man is the only one responsible for crowding the tech service people on getting that part to you.

## WHO GETS THE PART?

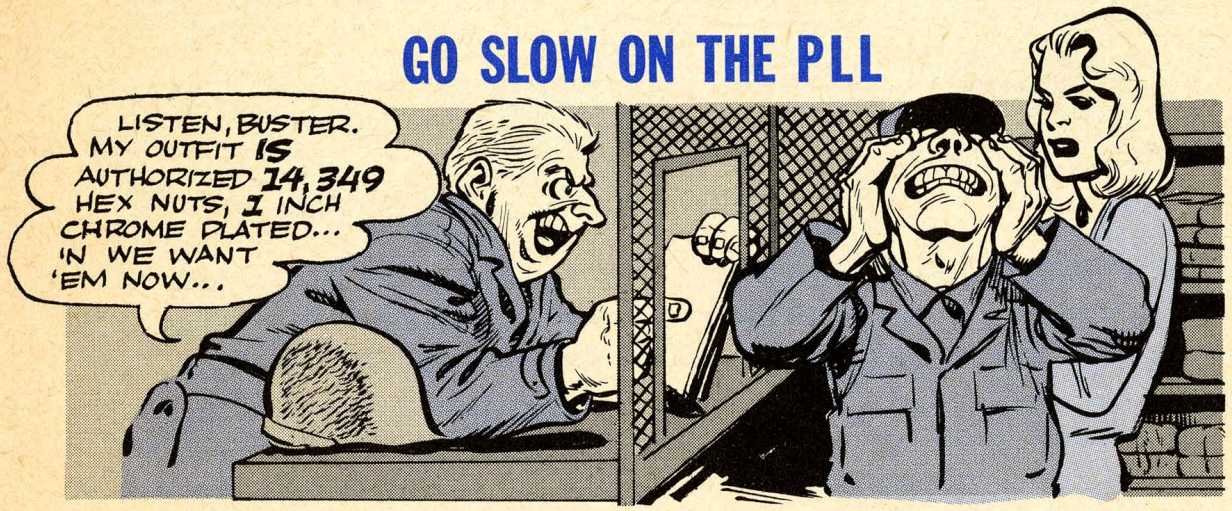
The guide book doesn't go into detail on this run-through—because it wants your organization or activity to run things your own way. The same goes for keeping track of which unit or subactivity is ordering what parts.

A good way to cut the confusion in half is for the battalion parts specialist to mark down the hand receipt file number of your unit or subactivity in Block 36 (remarks) or Block 7 (stock number) on the suspense copy of the 1546—since

this copy never goes out of the organization or activity area. But be sure this info goes on the No. 4 copy **after** it's detached from the six copies going to the tech service.

Another good deal is to keep separate bins right next to the parts room door, so the parts man can check to see if any of the just-received parts are due out to somebody in the battalion. Then, the first man coming into the battalion parts room won't be able to pick up a crafinac which was supposed to be due-out to you.

## GO SLOW ON THE PLL



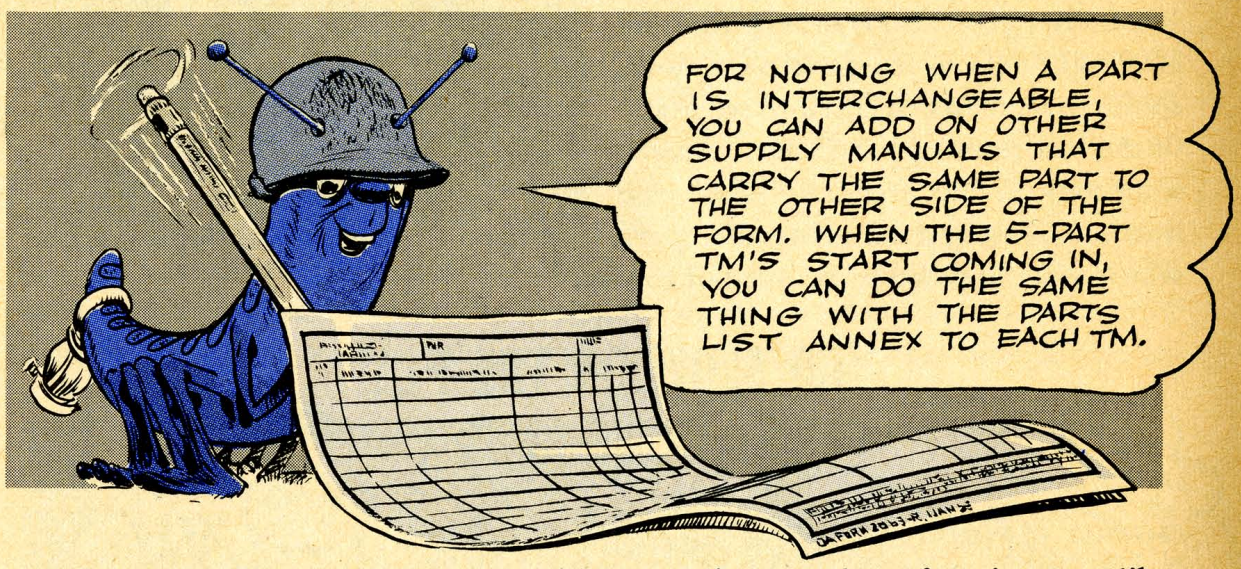

The new Prescribed Load List form was designed to give you a simple consolidated listing of **all** parts you're authorized to **stock**—and how many of each part you can keep on hand at one time.

Each tech service is, and always has been, responsible for telling you how many of its items you're allowed to stock. It does this by restricting you to those items with an allowance factor of 1 or more in the 7-series of supply manuals (Eng 7, Sig 7, CML 7, etc.) . . . or the new parts lists that are coming out with the five-part TM's.

Your organization or activity puts together this PLL (Prescribed Load List) by going through the repair parts section of the 7-series supply manual for each piece of equipment you're authorized to **stock** . . . leaving out the **as required** items.

It's easier to go through all the supply manuals in alphabetical and numerical order, starting a new sheet for the beginning of each manual—which gets listed under the AUTHORITY column. Then your organization or activity can multiply the quantity of that end item your TOE or TA allows you by the allowance factor (written as a decimal point number) in the 7-series supply manual for that repair part. This is your organization or activity's total authorized stockage of that repair part which goes in the QTY (quantity) column.

The location columns are filled in as a guide—so your organization can make a bin count to keep track of how many replacement orders are wanted to bring your on-hand quantity of that repair part up to snuff.

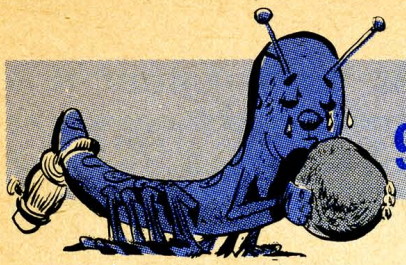



Where there's no supply manual or TM parts list on a piece of equipment—like on a lot of Engineer items—ask your parts man to get a listing of the parts from the tech service support people. They can get the list from their national maintenance point.

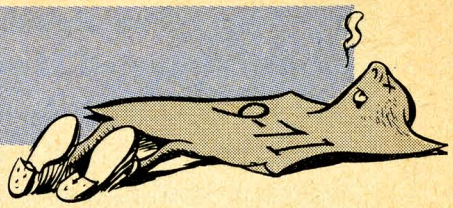
This 2063-R form sets out parts stockage in the same way your TOE or TA gives you certain allowances for the non-expendable end items you're allowed to have on hand.

When your local commander says it's okay for your organization or activity to keep a visible file for repair parts, all the important info can be copied onto the Title Inserts . . . so your organization or activity won't have to use its PLL to tell how many items to order for replacement. That's right . . . no using a PLL if an organization or activity's permitted to keep a visible file. All the interchangeability dope on the back of the PLL can be transferred to the REMARKS space on the Title Insert. But, if you feel better doing it, your outfit can hold onto the system of using PLL's to support the visible file system as a double check against errors.

The main point for a local commander to consider in allowing his organizations or activities to keep a visible file is: Does the variety and quantity of repair parts needed for maintenance justify the expense and time consumed in using a visible file instead of a Prescribed Load List? Not much point in fooling around with a visible file when there's only a few major items to support . . . the Prescribed Load List is a handier way of consolidating your organization or activity's **total** parts list.



## 9-71 UP AND DIED



Why can't you keep using DA Form 9-71, you ask? Well, it isn't being printed up any more. Page 59 of DA Pam 310-2 (Apr 58), the blank forms index, says it's obsolete. That was done to make room for the new system that goes with the PLL (Prescribed Load List). Instead of making out readjusted allowances continually, you now make a bin count with your PLL in hand at the organization or activity parts room.

## THE DAILY PARAGRAPH

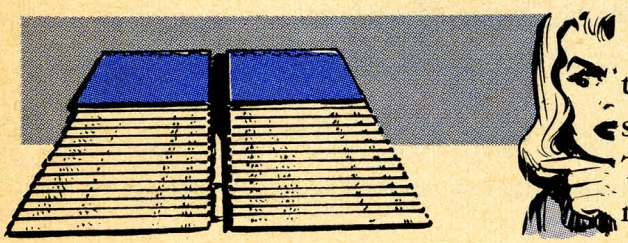
Of course, the only way your organization or activity is going to be sure of keeping as close as possible to your prescribed allowance on each item is to make use of the daily schedule that came into the system with the 1546. There's been a little confusion as to who says you can requisition parts daily. Well, for any of them as doubts the authority, there's AR 711-16 waiting to enter the spotlight. Naturally, these regulations leave room for local rules to change the daily schedule because of special situations—but that's the exception, not the rule.

You can keep up with the new system easy-like, if you put in for a replacement on the same—or the next—day each item is issued out of the battalion parts room.

## ANOTHER FILING SYSTEM—FOR PARTS

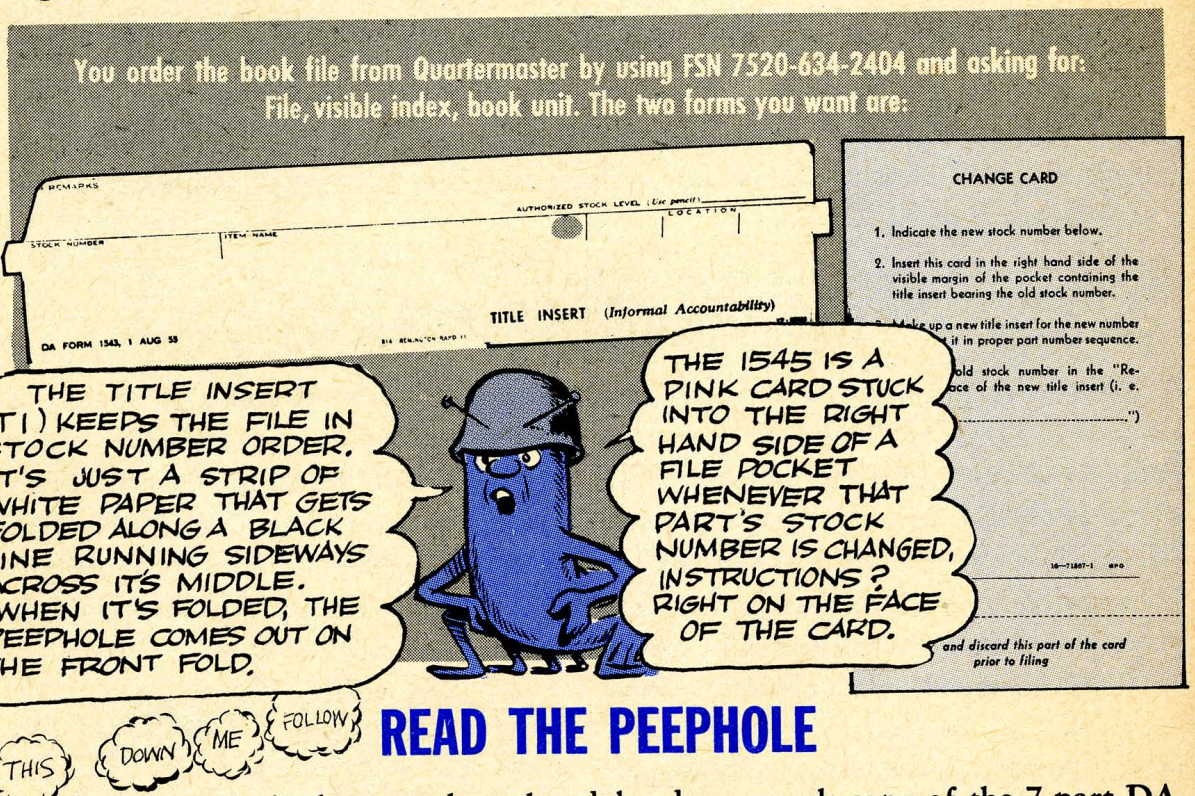
Since your repair parts are a lot faster moving than the end items that are taken care of by the property books, you need a fast—and separate—way of handling the filing chores. That's why the visible index system was thought up by the Army's planners.

## VISIBLE BOOK FILE

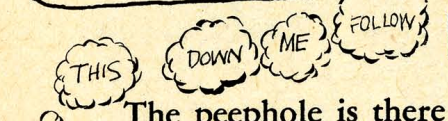


Here's a beaut of a suspense file for the repair parts you're authorized to stock at organizational or activity level. That means your battalion, group, regiment, branch or department keeps this

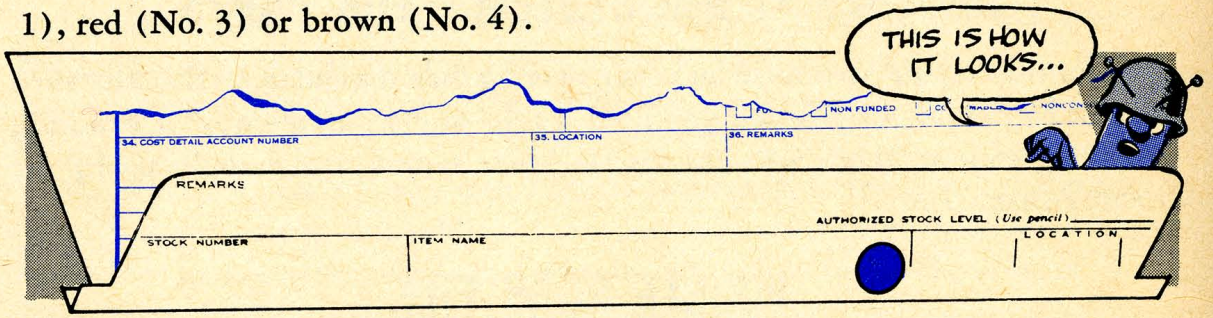
file for the whole organization or activity—since the organization or activity parts man makes out all 1546 requests or turn-ins. Of course, your local commander tells your organization or activity whether or not it will keep this file. To make it work right, you need a special metal book-type, folding file to hold everything together—and two special forms.




## READ THE PEEPHOLE




The peephole is there so the colored border on each copy of the 7-part DA Form 1546 will show. That's the gimmick which makes this a visible file deal. The idea is that a 1546 put inside the fold of the TI will show a certain supply action by the color in the peephole. No pulling out the copy to see if it's blue (No. 1), red (No. 3) or brown (No. 4).




These colors translate into the following types of action:

**BLUE**—It's a complete pre-printed set for future ordering use—no action's being taken right now.

**RED**—This item is due-out . . . completely or partially.

**BROWN**—The request or turn-in was made, but no answer's come back from tech service supply point yet.

## NO T-I's FOR A-R's

You can hardly find an excuse for making out a TI for some part you're only authorized to draw **as-required.** For the same reason, you don't really need any extra pockets for these as-required items. If you don't stock an item, you're making out a 1546 for it so seldom that you'd be wasting file space by keeping a separate pocket for it. A separate manila folder labeled **parts suspense** might do the trick on your as-required parts.

## COMPLETED ACTION FILE

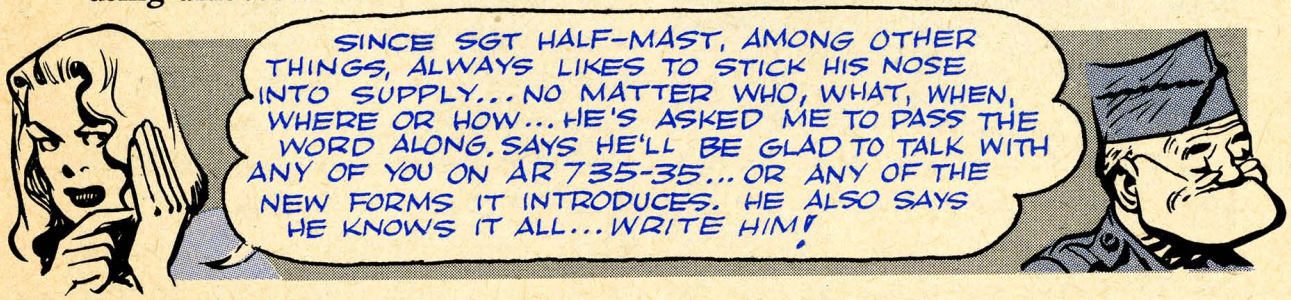
The AR also allows you to keep all the returned shipping copies (blue) of the 1546 in a Completed Action File. But, be sure to clean out all copies **six months old or over.** The only reason you'd want to play with this file is to back up any changes you want to make in your parts allowances . . . and after six months that file will have told the story.

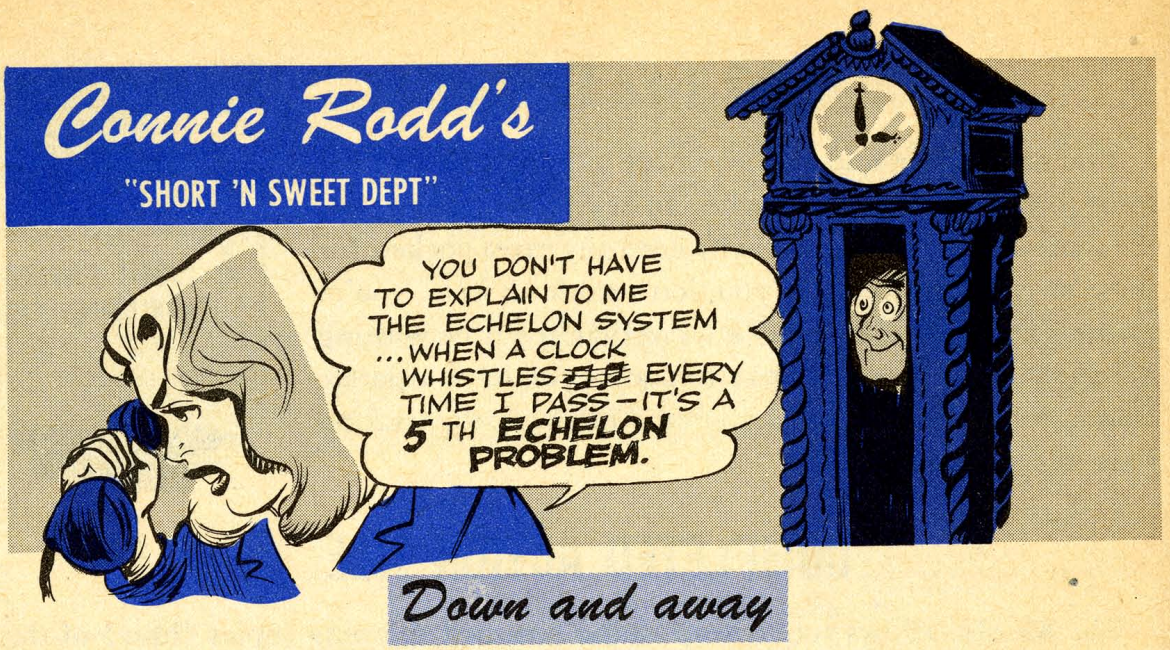
You might also want to do the same thing with the expendable types of housekeeping property—like brooms, mops, soap, pro kits, wash buckets, rags, etc.

This can help you to figure out replacement orders. Since a lot of places handle these items in a Self Service Supply Center, a Completed Action File can help you to put together a shopping list.

## THE WHOLE PICTURE

When AR 735-35 leaves you in doubt, there's a chance you can find some useful info in AR 711-16, which is on "Installation Stock Control and Supply Procedures." Even though this is a 3rd echelon guide book, nobody says you can't flip through its pages for a reference on supply problems. By putting AR 735-35 and AR 711-16 together, you get the Army supply picture from installation to using unit level.

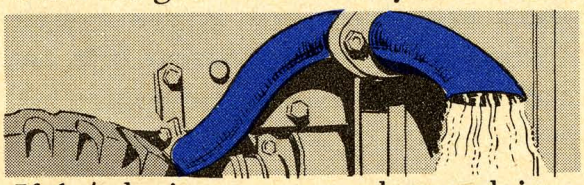




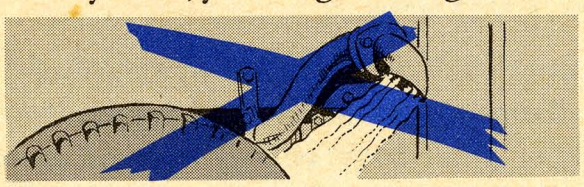

## Down and away

Watch for tailpipe extensions that point the wrong way on the 5-ton 6x6 G744-series trucks. Wrong-way extensions are unauthorized—strictly no-go. 'Specially if the pipe sticks out where it can hit another vehicle or a pedestrian.

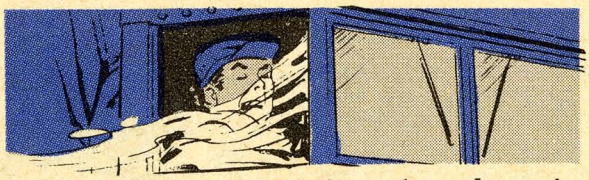
Extensions should point down toward the ground and away from tires.



If they don't, you can get damaged tires,



which is bad, or carbon monoxide in the cab, which is worse.



A tailpipe extension that doesn't point down is taboo. Use only the extensions that come under FSN 2990-040-2333. You can check the FSN by looking at the copy of the 1546 (or old 446) that came back from supply when you requisitioned the extension. If the extension is just coming in, the FSN is right on the package.

## Open wide

Too many of us take it for granted that the hoods on the G742-series 2½-ton trucks, the G744-series 5-ton trucks and the G792-series 10-ton trucks are going to stay in place when they're opened. It's a bad state of mind to get into, because comes a sudden gust of wind, and you could find your head down near the crankcase.

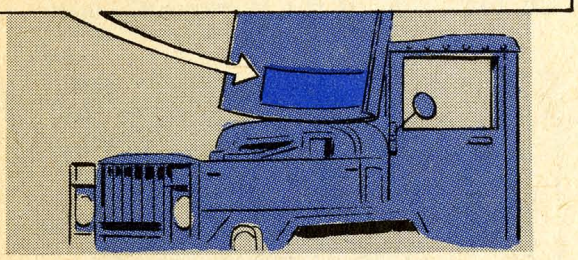
There's a hook above the windshields on these trucks. This mates with a catch on the trucks' hoods when the hoods are opened. But, some people working on those engines just don't hook up.

Well, it's official now—TB Ord 2300-20/2 (14 May 58) lays down the law. It says you're to stencil a warning notice on the underside of the hood, so that

every time you open the hood, you won't miss it.

In 1-in high letters, with white paint, at the rear of the hood, you stencil:

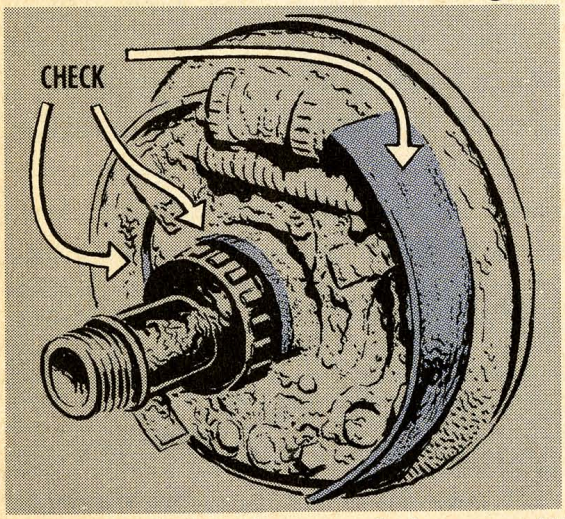
WARNING: SECURE HOOD IN RAISED POSITION WITH HOOK BEFORE SERVICING ENGINE.



Why not stencil it on pronto? And, always follow the directions — could save you a headache.

## A break for brakes

After getting back to garrison from a rough stay in the field you're in for a lot of checking, fixing, and cleaning up. If you've been in muddy or sandy country, the first job at the top of your list will be checking wheeled vehicle brake shoes and drums and wheel bearings.




Most of the shoes and drums will need cleaning. And, could be that the wheel bearings need repacking.

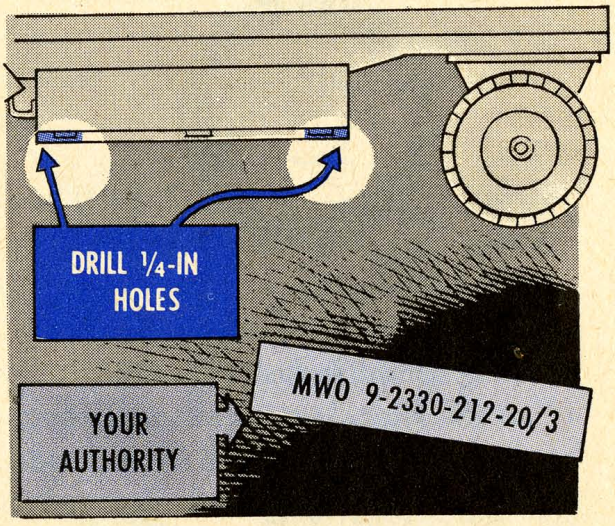
If you've been in sandy areas for quite a while, take an extra good look at the brake shoes. They may need to be replaced.

These checks go for any time—but especially after maneuvers in a dusty or sandy area.

## Drill 'em out

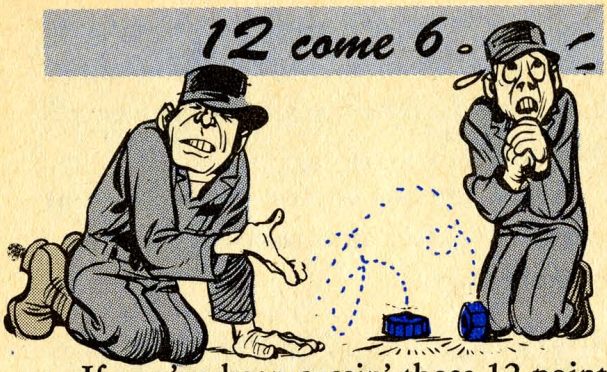
Equipment's been going to pot in the stowage boxes of those M261 guided missile flat bed trailers. Water gets in, collects there and rusts or corrodes tools, parts and other stuff found in those boxes.

You can now keep your equipment in shape by drilling a ¼-in hole in each corner of that box. This lets the water

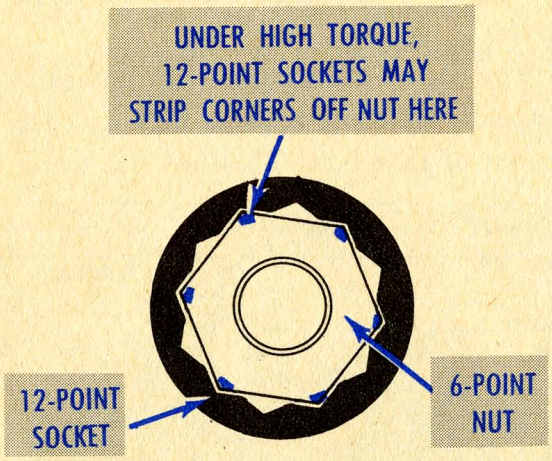



drain out. Of course, it's always a good idea to unload that stowage box every so often and wipe off the equipment that's been kept there. Paint the box and the equipment, if it needs it. By the way, your authority for drilling those holes is MWO 9-2330-212-20/3 (21 Apr 58). It's urgent. Your second echelon mechanic's supposed to do the job.

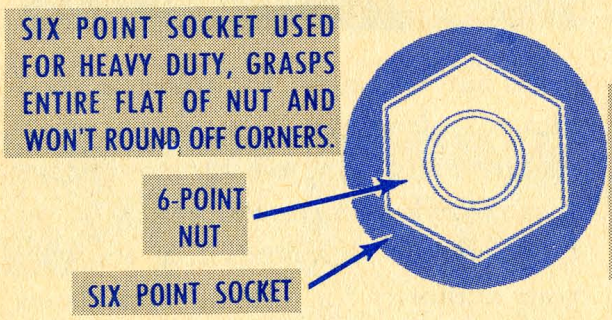
## 12 come 6 . . .



If you've been cussin' those 12-point sockets, FSN 5120-181-6813, because they won't keep a good hold on the end connectors of the M48-series tanks, the M103 tank and the M51 tank recovery vehicle. try this.

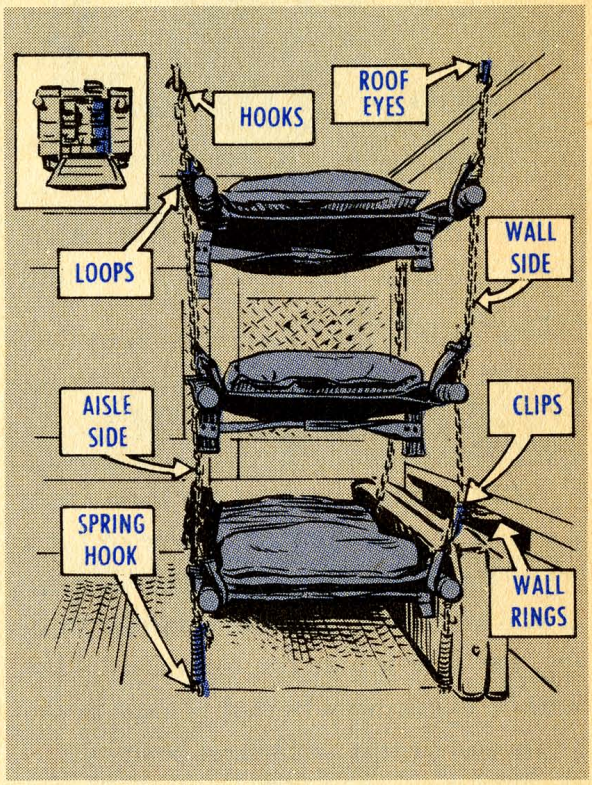



You're now authorized to have as OVM a 6-point socket, FSN 5130-293-1411. It'll take a better grab on the bolt heads when you go to take the end connectors off. By taking hold good and tight, you'll save a chewed-up socket or nut. So, why not requisition yours now.




## M59 litter chains

Your M59 armored personnel carrier should be all set to take care of litters (stretchers) when they come aboard. You'll need chains to hang three litters on each side of the personnel compartment.




The chains should be in the tray back of the fixed fire extinguishers. Now, if your M59's serial number is below 2692, you might have strap-type carriers. Replace them with the chain carriers. Here's the info on getting 'em:

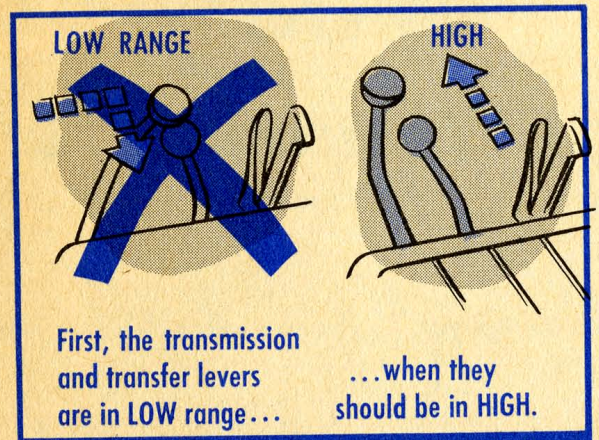
**CHAIN ASSEMBLY, WALL SIDE**
**FSN 2510-322-2508**

**CHAIN ASSEMBLY, AISLE SIDE,**
**FSN 2510-322-2509**

If you don't have those chains, requisition them. Keep 'em ready in case you're called on to handle stretcher cases.

## Faceless clutches

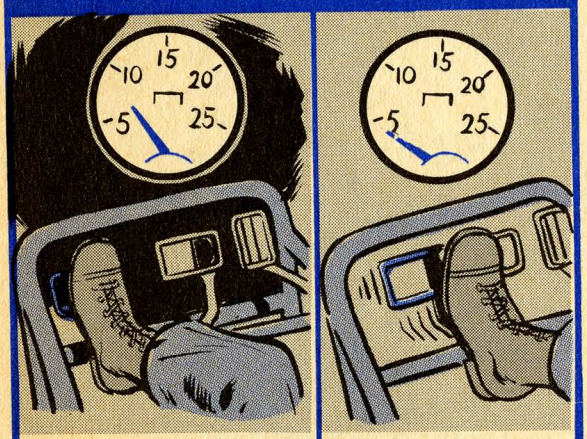
Some M274 Mechanical Mule clutch facings are taking a beating when the vehicle is being towed to start it. Two things can do it:




First, the transmission and transfer levers are in LOW range...

...when they should be in HIGH.

By suddenly engaging the clutch with the gears in LOW, a terrific torque is applied on the facings that'll tear the devil out of 'em.

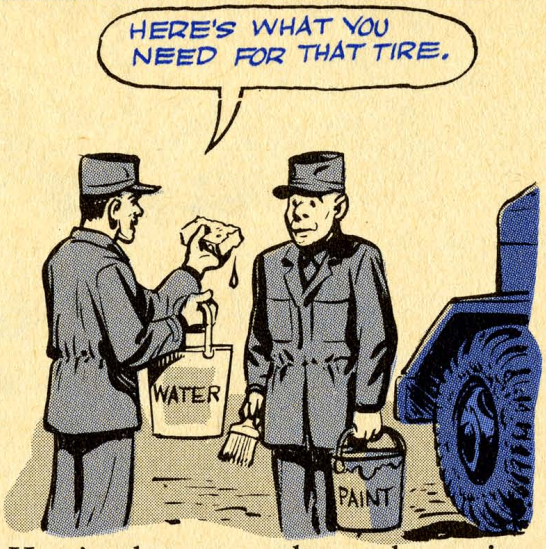



Second, even with the gears in HIGH, letting the Mule reach a speed of 5-10 MPH before engaging the clutch beats up the facing.

Engage the clutch **before** the Mule reaches 5 MPH if you can, and let up on the clutch pedal slowly.

Take a squint at TM 9-8034-10, para 34a (1) through (7). It tells how to tow start your Mule. If your Mule's completely disabled, follow para 34b (1) through (3).

## Plain talk—no paint




Here's the scoop—keep those tires of your vehicle clean by using elbow grease, but never paint them for spit and polish reasons.

This type of painting adds up to lots of time and money down the drain for nothing. You'd best put this time to real maintenance that'll pay off.

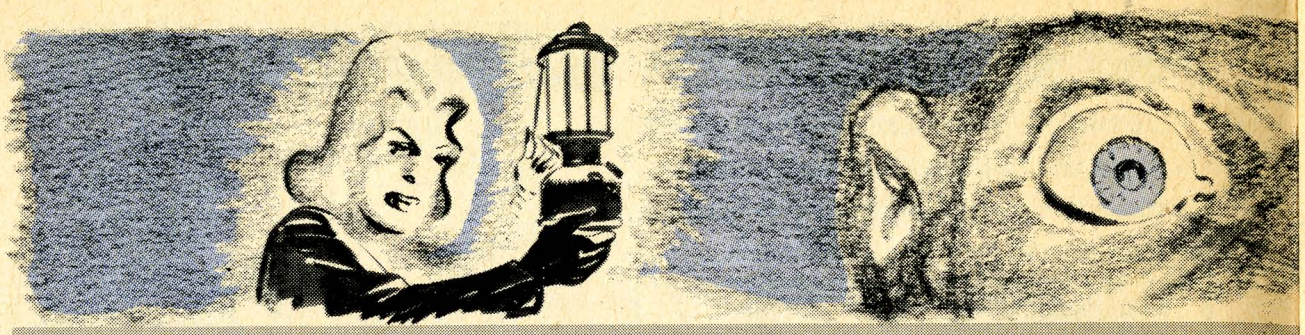
Whatever you do, don't confuse the new rubber coating preservative with tire paint. The preservative's good stuff, and will keep tires from cracking.

This rubber preservative should always be used before a vehicle goes into storage. If you can get a hold of some, it'd be a good idea to put it on the tires of those vehicles in use, too. It'll keep the tires from cracking and will add miles to their life.

Your support unit can get this preservative for you with these stock numbers.

For a 1-gal can.....FSN 8030-543-7634 (ORD)
For a 5-gal can.....FSN 8030-543-7636 (ORD)
For a 55-gal drum...FSN 8030-543-7635 (ORD)

This is new stuff, and it's at the depots waiting to be issued.



# BE YOUR OWN INSPECTOR

And then there was light—until the gasoline lantern's mantle slipped in a mickey. Then, there was nothing but blackness.

Don't let it happen to you.

The following checklist points out those things you ought to look for to keep your lantern cooking with gas:

**BURNER TUBES**—Dented, bent, obstructed.

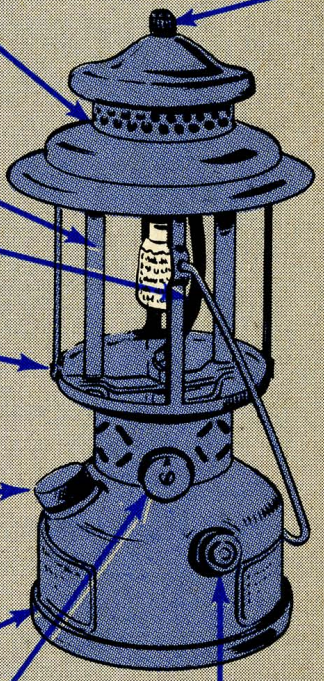
**VENTILATOR**—Holes bent.

**HOOD RETAINING NUT**—Missing, threads stripped.

**GENERATOR** — Carbonized, clogged tip.

**FRAME ASSEMBLY**—Dented, bent.

**REPAIR PARTS CONTAINER**—Threads stripped. Container dirty, no spare parts. Container cap's threads stripped, gasket missing or torn. (Repair Parts Kit, gasoline lantern, FSN 6260-553-1090, should be kept with the lantern. This kit contains one filler cap gasket, one generator, one pump leather, one valve stem packing and one pricker. Also with the lantern should be a box of spare mantles, FSN 6260-270-4060.)



**FOUNT**—Dented, paint peeling, chipped.

**FUEL VALVE KNOB**—Tight or loose (should work easily. Opens to left—locks to right). Broken off.

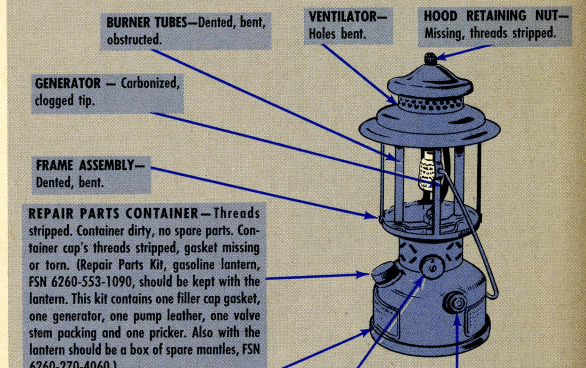
**PUMP**—Cap loose, threads stripped. Plunger handle hard to work. Pump leather cup feels hard to the touch. (Should feel soft. If hard, apply some light oil). Spring missing.

# BE YOUR OWN INSPECTOR

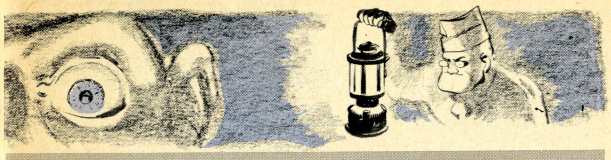
And then there was light—until the gasoline lantern's mantle slipped in a mickey. Then, there was nothing but blackness.

Don't let it happen to you.

The following checklist points out those things you ought to look for to keep your lantern cooking with gas:

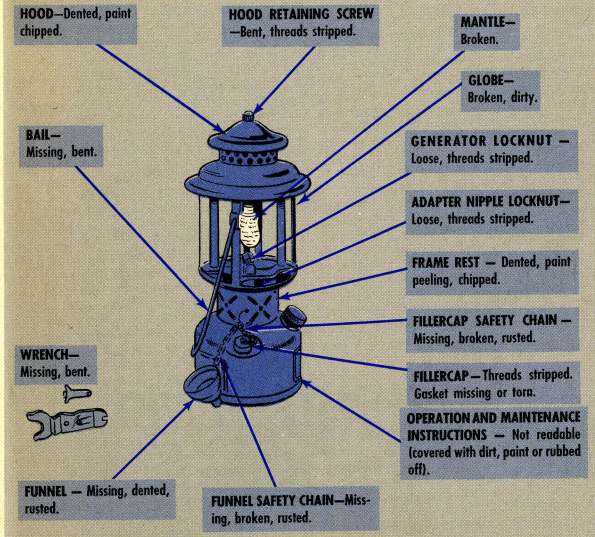


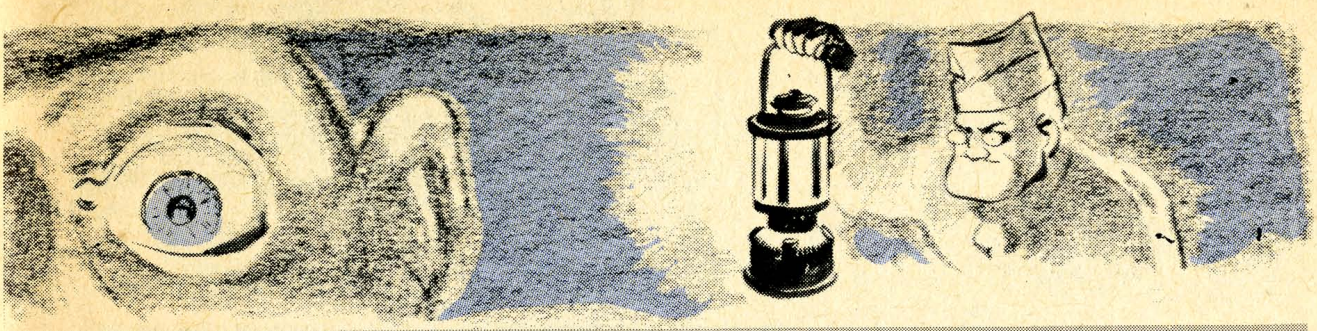


# ON YOUR GASOLINE LANTERN

TM 10-6260-1-12 and TM 10-6260-1-12 P give you the maintenance and supply dope.





# ON YOUR GASOLINE LANTERN

TM 10-6260-1-12 and TM 10-6260-1-12 P give you the maintenance and supply dope.

**HOOD**—Dented, paint chipped.

**HOOD RETAINING SCREW**—Bent, threads stripped.

**MANTLE**—Broken.

**GLOBE**—Broken, dirty.

**BAIL**—Missing, bent.

**GENERATOR LOCKNUT**—Loose, threads stripped.

**ADAPTER NIPPLE LOCKNUT**—Loose, threads stripped.

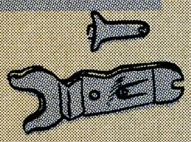
**FRAME REST**—Dented, paint peeling, chipped.

**FILLERCAP SAFETY CHAIN**—Missing, broken, rusted.

**FILLERCAP**—Threads stripped. Gasket missing or torn.

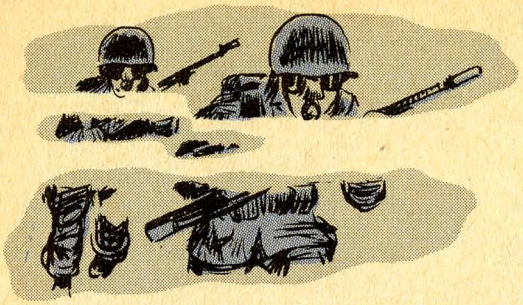
**OPERATION AND MAINTENANCE INSTRUCTIONS**—Not readable (covered with dirt, paint or rubbed off).

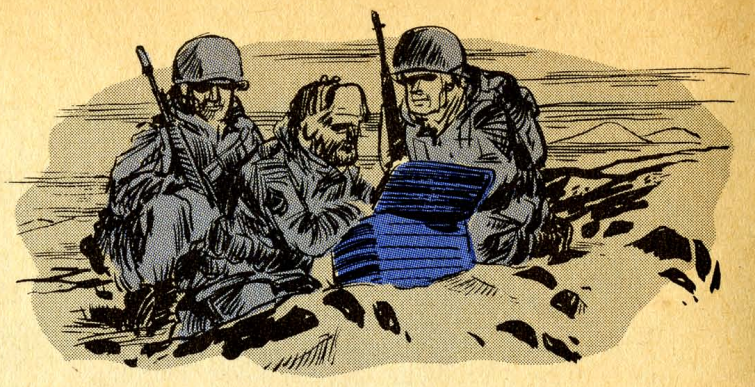
**WRENCH**—Missing, bent.



**FUNNEL**—Missing, dented, rusted.

**FUNNEL SAFETY CHAIN**—Missing, broken, rusted.

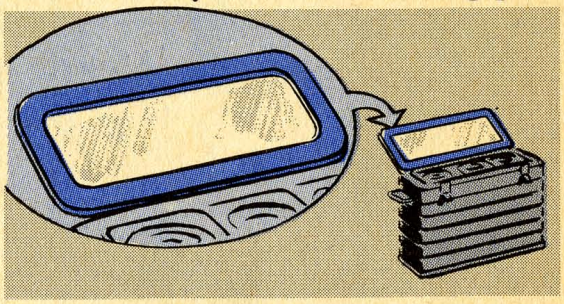




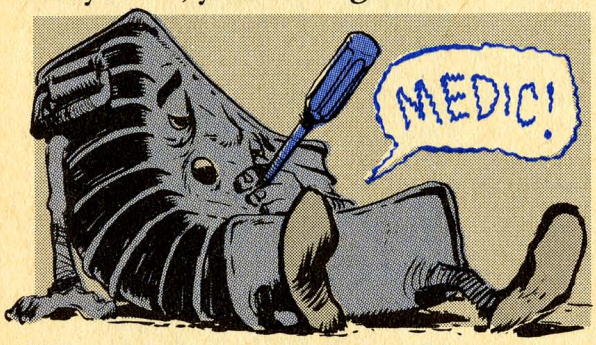
# CHIT-CHAT ON CHOW CONTAINERS

Here's a tip that'll help you keep food fresher when you lug it in those M1944 insulated food containers—

Chances are you've been putting the gasket that goes between the container body and the lid around the edge of the container body. This is the wrong place for it.



The gasket should be pushed into the edge of the lid to make a good seal and to keep food from slopping all over the place while being moved. You'll find when you put the gasket around the lid, it'll fit a lot tighter than it did around the body. And, you won't get food smeared all over it when you're dishing out chow.



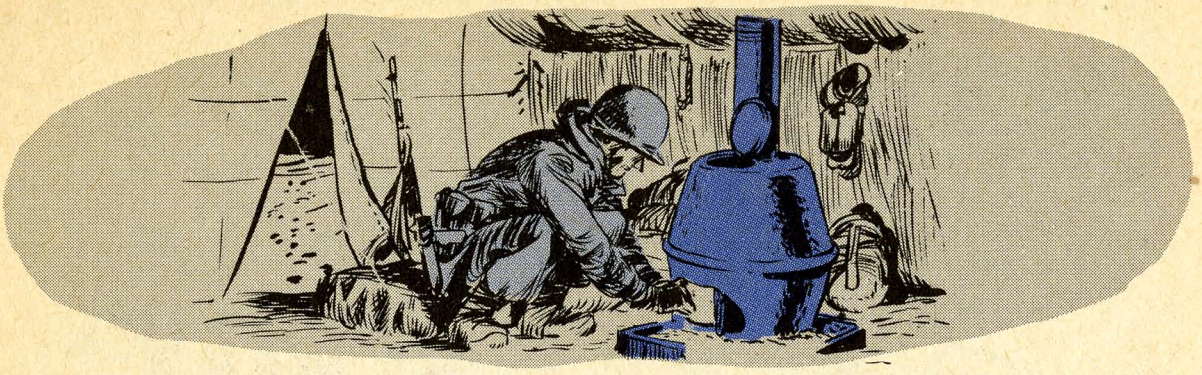

One thing you shouldn't do is use an icepick anywhere near that container. Some guys have put ice in the container and then chopped away with an icepick. One slip and goo'by container. Best do your chopping before you put the ice in.

All this adds up to this big thought—handle with care, just like any box that's sensitive to the touch. This goes for lugging those containers cross-country on a vehicle. Make sure they don't get banged up.

# KNEE DEEP? NEVER!

When it comes to storing your M9 or M9A1 protective mask, caution and common sense should tell you it's bad business to pile 'em knee deep in a heap.

If they're going to protect you, they've got to be pampered. So store 'em



like TM 3-205 says—in a cool, dry place and **never** more than five high on a shelf.

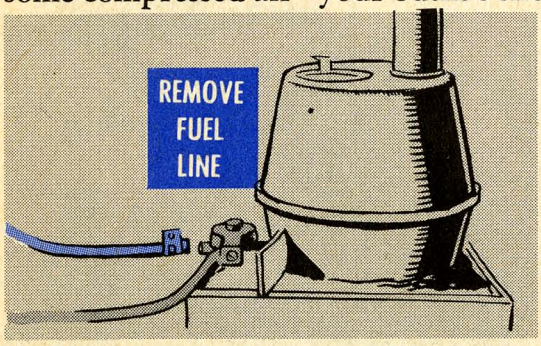
When you're getting them ready for storage, leave the canister attached, put them in the carriers the right way, and then either hang 'em by the D-ring on the carrier or put 'em on a shelf. This way they'll be free from outside pressures which could crush 'em.

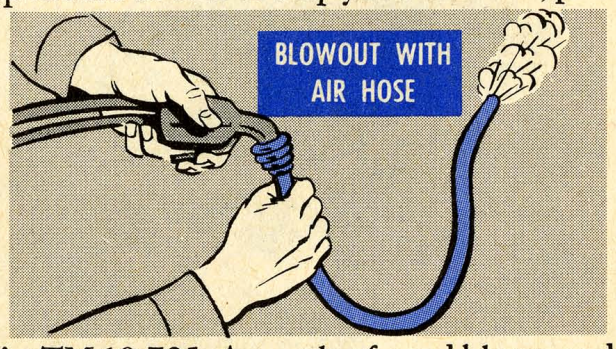
## YOU WANT A STEADY FLOW?

You say your M1941 tent stove fuel lines are clogged? You say you can't get a steady flow of juice into the burner? You say it's coming through in drips and drops?

Tell you what you ought to do—

Take the fuel line off your oil burner and take it to a place where you can get some compressed air—your outfit's shop should be able to help you out. Then, pro-



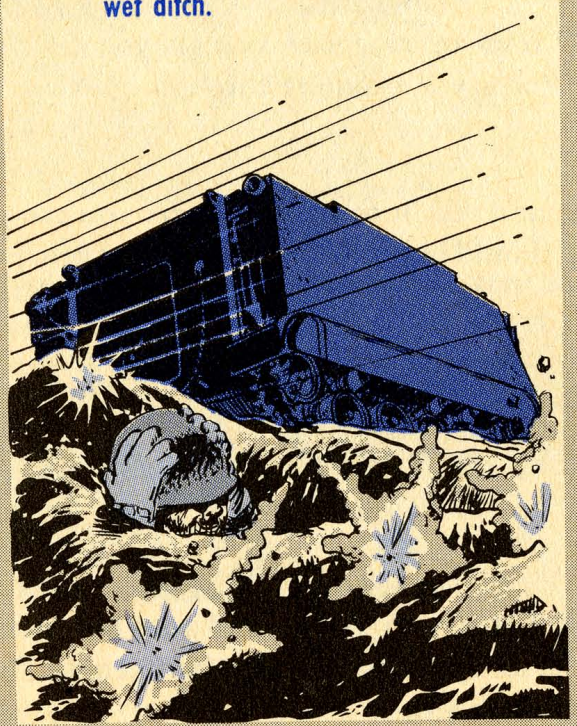




ceed to blow that hose out, like it says in TM 10-725. A couple of good blows, and your hose'll work as good as new. The same applies to the pipe between the float valve and burner. Just remove it and clean it out.

# GENTLY, GENTLEMEN, GENTLY

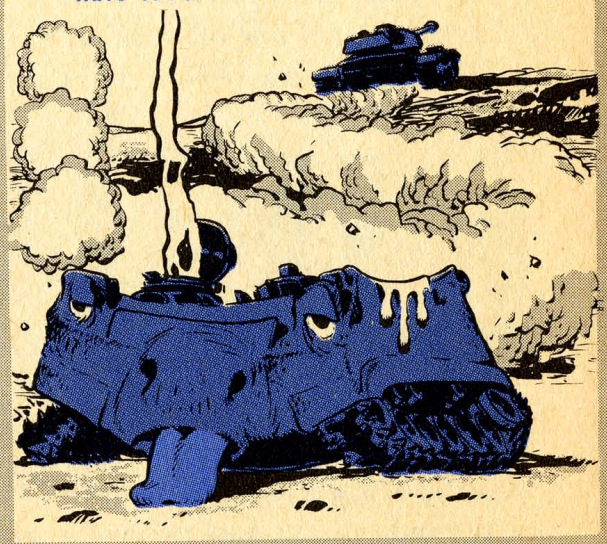
ON YOUR M59 ARMORED PERSONNEL CARRIERS...

The M59 is a mighty handy vehicle to have around. Ridin' beats walkin' any day in the week, and twice on river crossings. Also, when there's any stray hardware flying around, it's comfortin' to be inside your tracklaying coal-scuttle instead of huggin' the bottom of a wet ditch.



But the best of vehicles won't hold up if you keep 'em doing more than they're designed for. And some people have been expecting their M59's to put out like their big sisters, the M75's. This is plumb unreasonable.

The M59 is not designed and not intended to get up and run all day with the tanks. After all, it gets along on two GMC 302 engines—604 cubic inches—while the M75's and light tanks have 895 cubic inches, and the medium tanks have 1790.



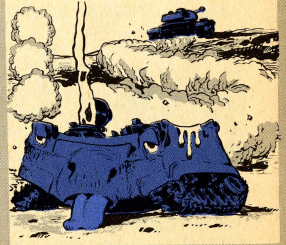
# GENTLY, GENTLEMEN, GENTLY

ON YOUR M59 ARMORED PERSONNEL CARRIERS . . .

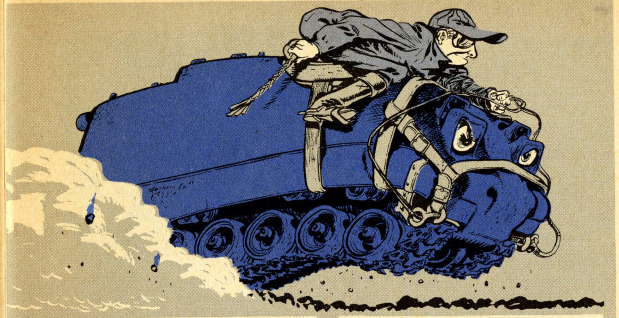
The M59 is a mighty handy vehicle to have around. Ridin' beats walkin' any day in the week, and twice on river crossings. Also, when there's any stray hardware flying around, it's comfortin' to be inside your tracklaying coal-scuttle instead of huggin' the bottom of a wet ditch.

But the best of vehicles won't hold up if you keep 'em doing more than they're designed for. And some people have been expecting their M59's to put out like their big sisters, the M75's. This is plumb unreasonable.

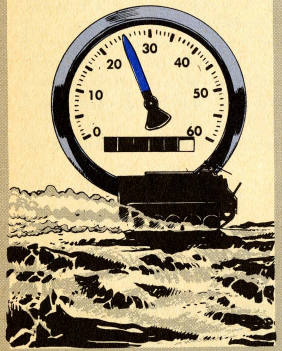
The M59 is not designed and not intended to get up and run all day with the tanks. After all, it gets along on two GMC 302 engines—604 cubic inches—while the M75's and light tanks have 895 cubic inches, and the medium tanks have 1790.



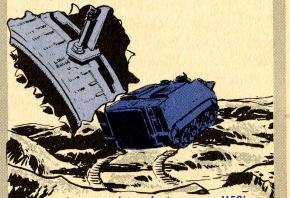




On the other hand, it wouldn't be right to expect your M59 to go as far between engine changes as your G-749 trucks do, either. Though they have the same engines and similar transmissions, the final drive in the M59 lets the engine turn over almost twice as many revolutions per mile as it does in the truck.

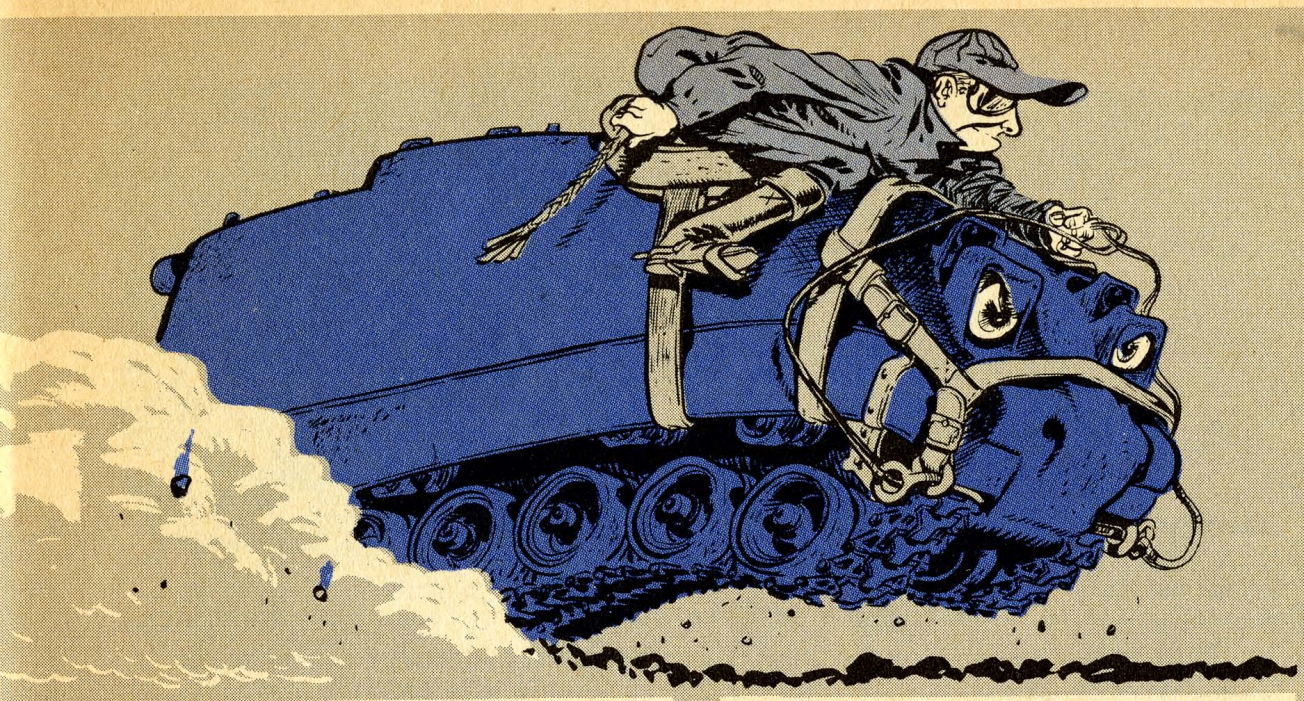



So, assuming you want a good running M59 around if and when the trouble starts, you've gotta play it cool and gently, gently, gently, gently until then. Don't try and beat that 32-MPH top speed. Better plan to run about 25 on good going.

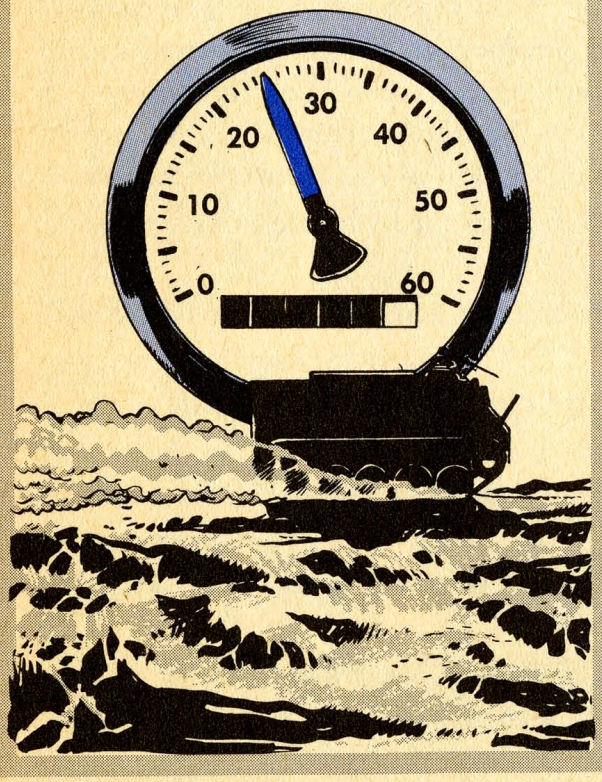


And in general, just don't use your M59's any more than you have to, and take it easy when you do. Best run with your differential in low range any time you're off the roads.

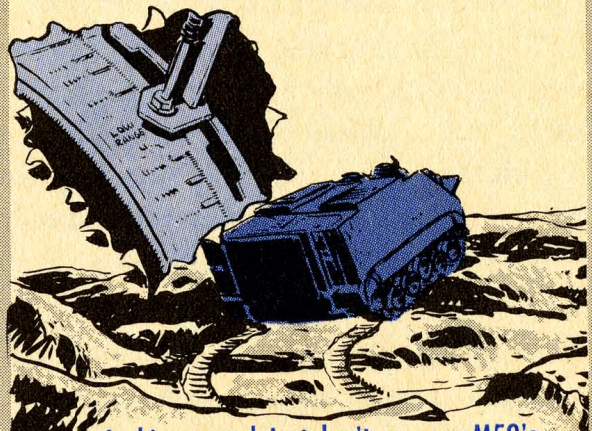
Then—if and when a tactical situation demands it—you can belt the bejabers out of 'em long enough to accomplish your mission.



On the other hand, it wouldn't be right to expect your M59 to go as far between engine changes as your G-749 trucks do, either. Though they have the same engines and similar transmissions, the final drive in the M59 lets the engine turn over almost twice as many revolutions per mile as it does in the truck.



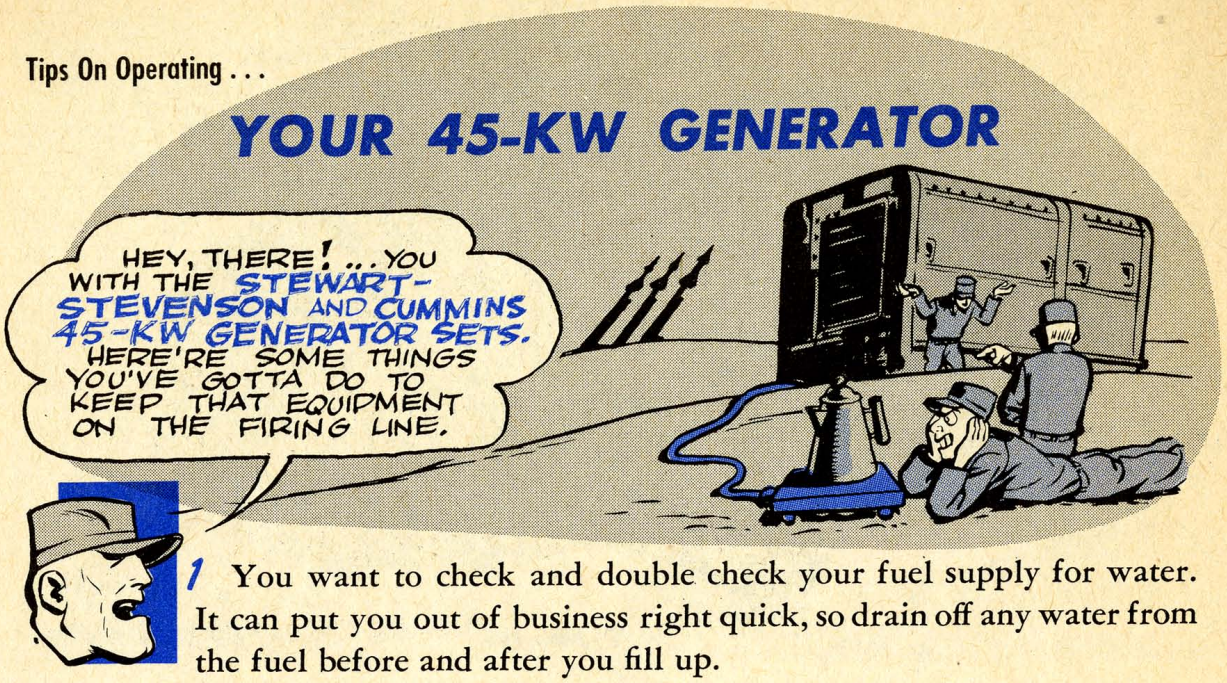

So, assuming you want a good running M59 around if and when the trouble starts, you've gotta play it cool and gently, gently, gently, gently until then. Don't try and beat that 32-MPH top speed. Better plan to run about 25 on good going.



And in general, just don't use your M59's any more than you have to, and take it easy when you do. Best run with your differential in low range any time you're off the roads.

Then—if and when a tactical situation demands it—you can belt the bejabers out of 'em long enough to accomplish your mission.

# YOUR 45-KW GENERATOR




**1** You want to check and double check your fuel supply for water. It can put you out of business right quick, so drain off any water from the fuel before and after you fill up.

**2** Never let any water . . . rain or otherwise . . . get to the electric governor control and the hydraulic actuator.

**3** Keep your side doors closed, too. They'll allow your generator to maintain the correct operating temperature of 165° to 185°F.

**4** You know you'll never prop the radiator shutters open or closed. They're thermostatically controlled to help maintain the right temperature to prevent carboning of the injector cups or tips.

**5** When you shut it down, you have to shut off the Engine Safety Switch (governor switch) just a wink before you flick off your Engine Run Switch. If you don't turn off the safety switch before the engine is turned off, you won't be able to start the engine. Once the hydraulic pressure drops, the hydraulic actuator fails to return to its proper position for starting and blocks off the flow of fuel from the fuel pump.

**6** You can't overdo keeping the filter (strainer) on the hydraulic actuator clean. Keep your hydraulic fluid clean.

**7** You've gotta keep dirt off the plates of the rectifier. Dirt will cause overheating, shorting, and arcing across the plates.

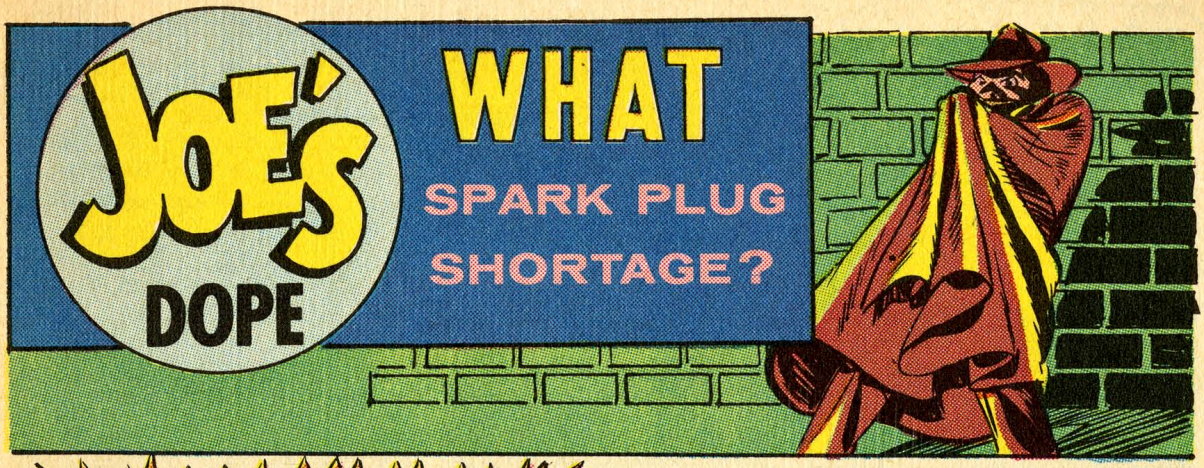
**8** Remember that your radiator has to be kept clean, flushed, and filled with the proper coolant.

**9** Be on the level. Keep your unit on a firm foundation and as level as possible to cut down vibration.

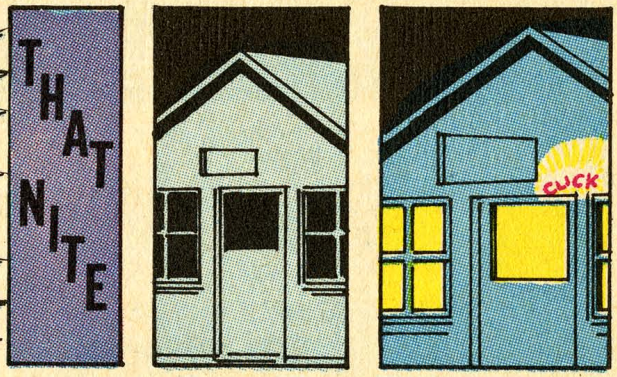
**10** Don't attempt any adjustments on the electric governor control box. Call your support unit. Don't tamper with the lock wire.

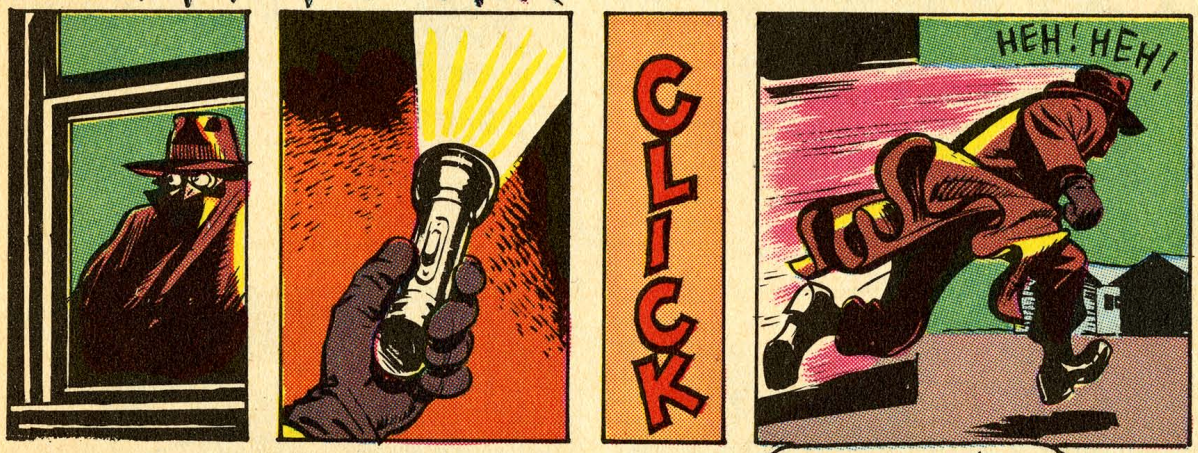
On your Stewart-Stevenson Model 28100, watch for water leaking on the control box. Tailor a sheet-metal cover to fit over the box to keep the water out. Your support unit will help you.

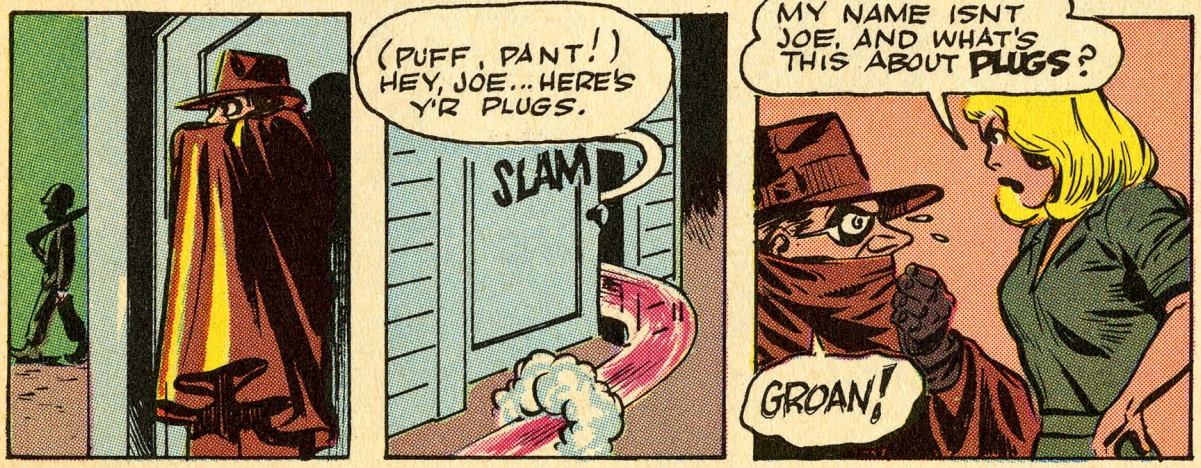
Sgt Dozer

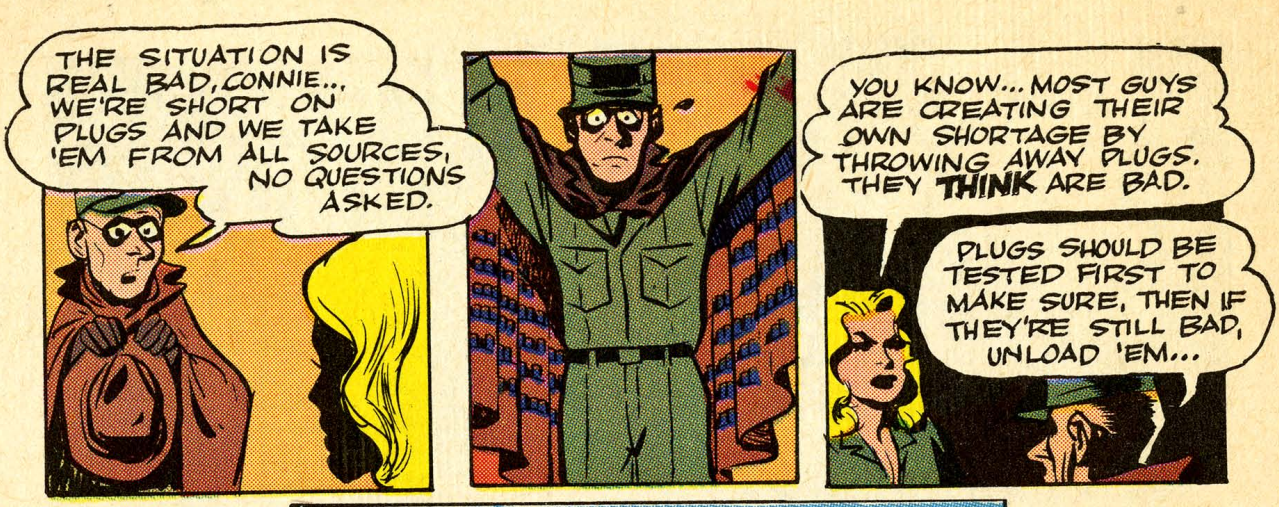

JOE'S DOPE
WHAT
SPARK PLUG SHORTAGE?

FT. RE-UPS NEWS
MOTOR PARK FINDS SPARK PLUG SHORTAGE ACUTE.
MYSTERY SURROUNDS THIS SITUATION.

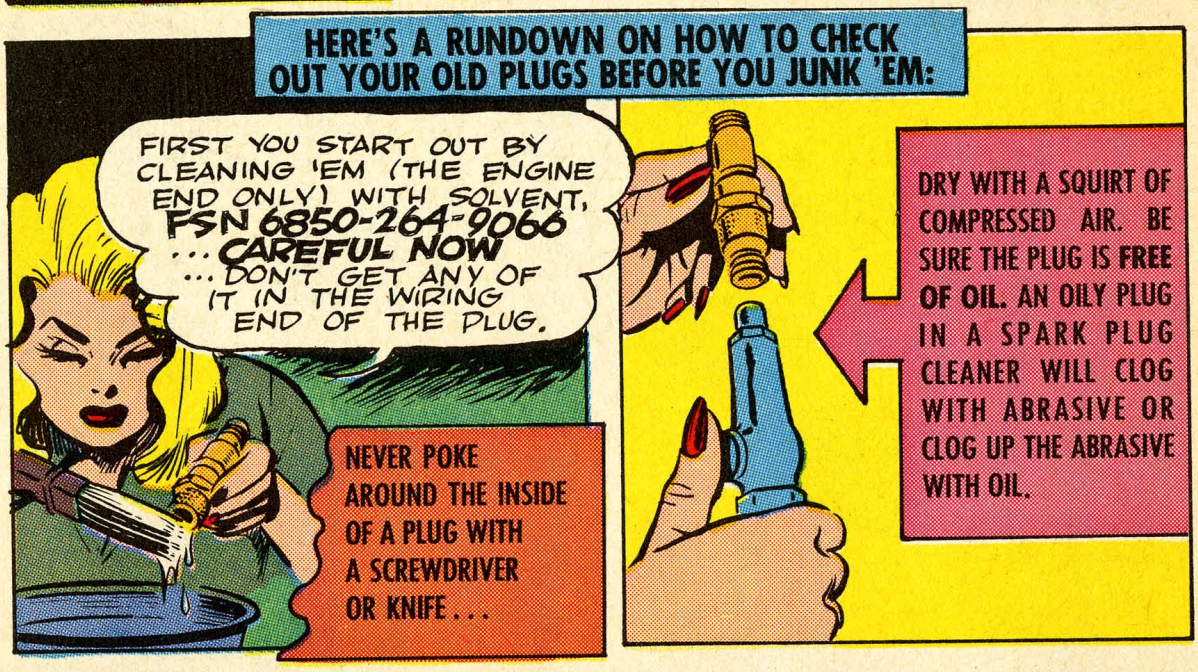

THAT NITE
CLICK

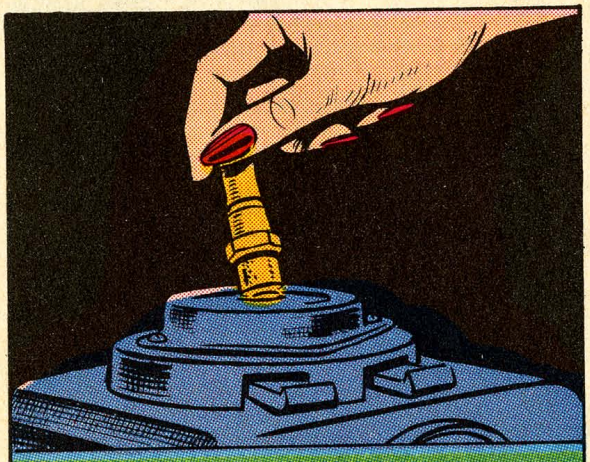

CLICK
HEH! HEH!


(PUFF, PANT!) HEY, JOE... HERE'S Y'R PLUGS.
SLAM
MY NAME ISN'T JOE, AND WHAT'S THIS ABOUT PLUGS?
GROAN!

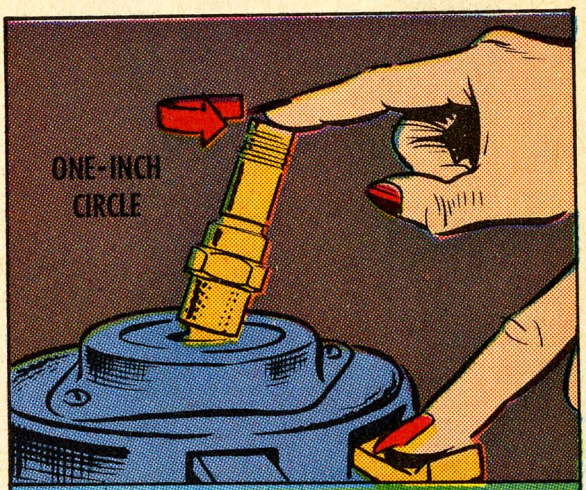



## HERE'S A RUNDOWN ON HOW TO CHECK OUT YOUR OLD PLUGS BEFORE YOU JUNK 'EM:



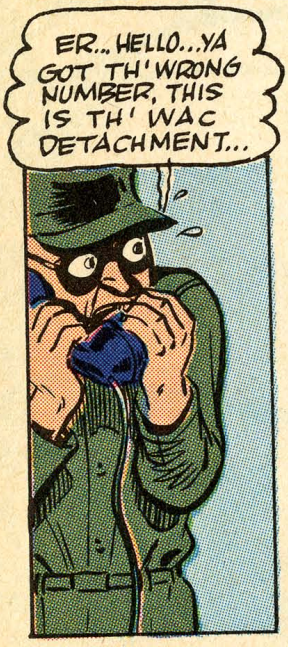



Now you put the plug in the rubber adapter of the spark plug cleaner . . . be sure the adapter's the right size. The right one fits nice 'n' tight . . . most adapters are marked for size . . . so check first.

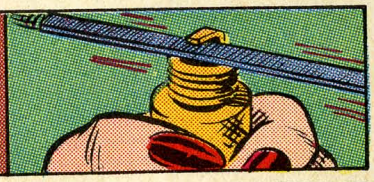



Put your finger on top of the plug, and swing it in a one-inch circle while pressing the abrasive blast valve of the cleaner . . . A three second blast is enough.

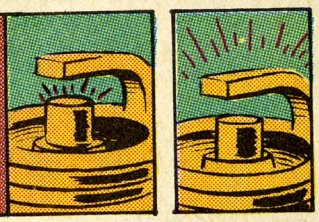
After each 3-second blast . . . press the air blast valve for about a second . . . be careful not to thrust plug in the adapter.



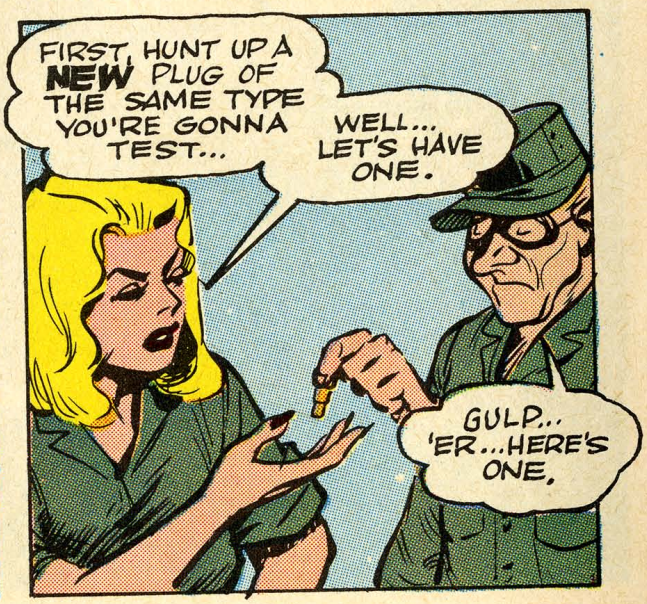
Open the gap enough to get an ignition point file or stone in.



File bottom center electrode and area of ground electrode facing center electrode flat 'n' bright.



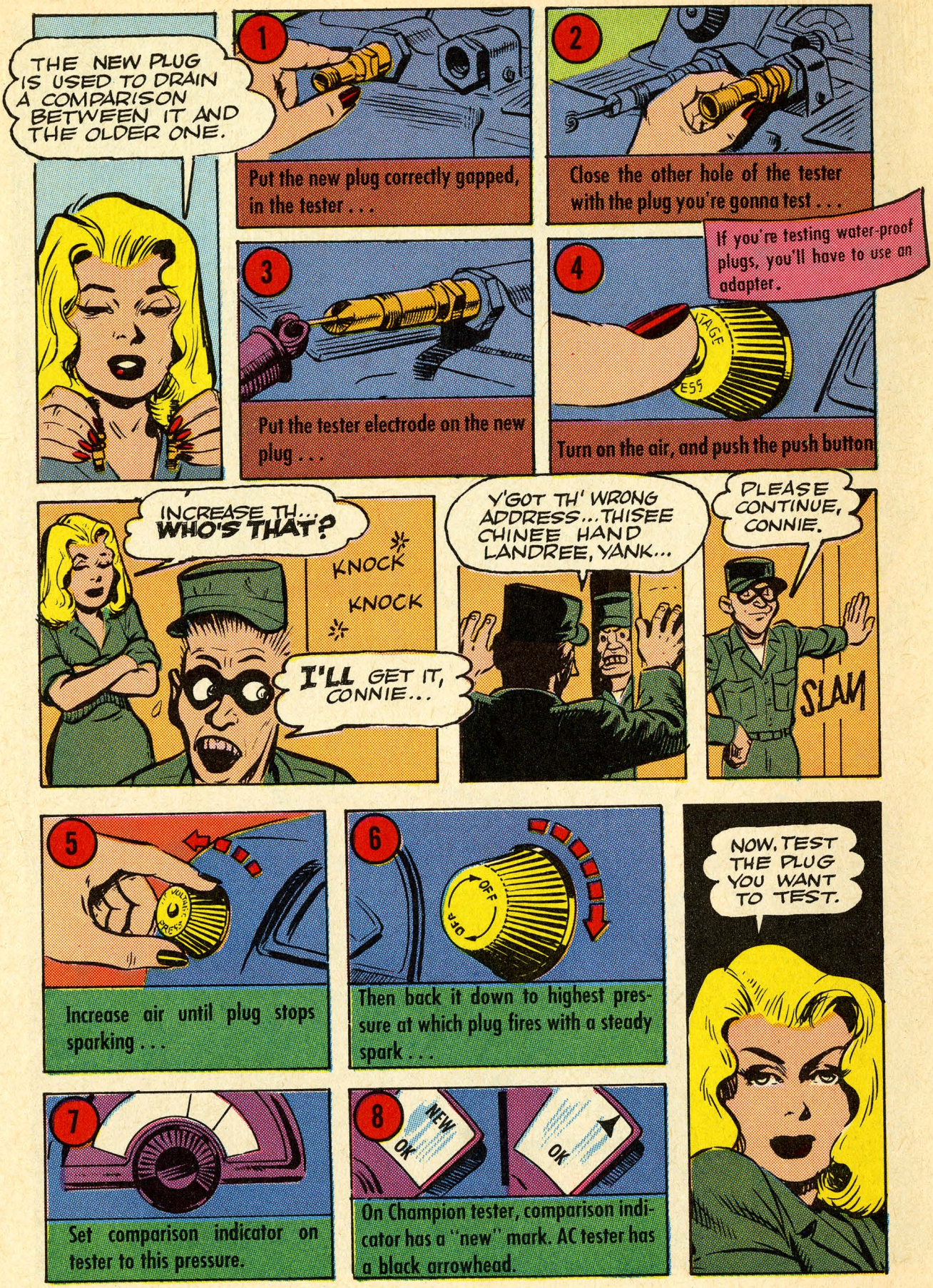
Gap your electrodes to the spec your TM calls for . . . you're ready to test that plug . . .

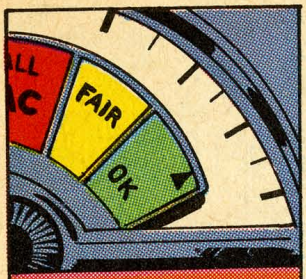


JOE'S
Dope Sheet
WE HAVE THE WORLD'S BEST EQ

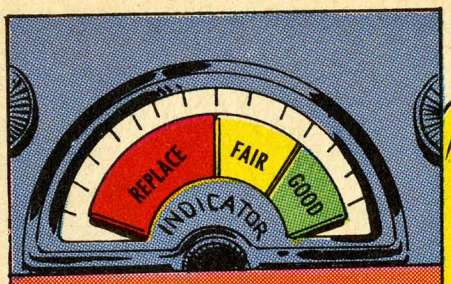
JOE'S Dope Sheet
No amount of respect is too great
For this firespittin', tough bantamweight.
His mission's so vital,
At work and at idle,
That a miss could determine your fate.
WE HAVE THE WORLD'S BEST EQUIPMENT ... Take care of it

No amount of respect is too great
For this firespittin', tough bantamweight.
His mission's so vital,
At work and at idle,
That a miss could determine your fate.
UIPMENT . . . Take care of it

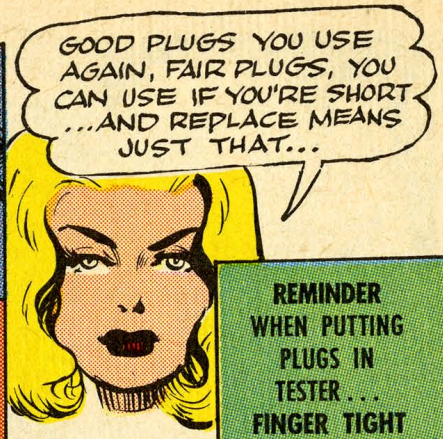

THE NEW PLUG IS USED TO DRAIN A COMPARISON BETWEEN IT AND THE OLDER ONE.
1
Put the new plug correctly gapped, in the tester . . .
2
Close the other hole of the tester with the plug you're gonna test . . .
3
Put the tester electrode on the new plug . . .
4
If you're testing water-proof plugs, you'll have to use an adapter.
Turn on the air, and push the push button
INCREASE TH... WHO'S THAT?
KNOCK KNOCK
I'LL GET IT, CONNIE...
Y'GOT TH' WRONG ADDRESS...THISEE CHINEE HAND LANDREE, YANK...
PLEASE CONTINUE, CONNIE.
SLAM
5
Increase air until plug stops sparking . . .
6
Then back it down to highest pressure at which plug fires with a steady spark . . .
NOW, TEST THE PLUG YOU WANT TO TEST.
7
Set comparison indicator on tester to this pressure.
8
NEW
OK
OK
On Champion tester, comparison indicator has a "new" mark. AC tester has a black arrowhead.




Leave the comparison indicator set and run your test just like you did for the new plug.

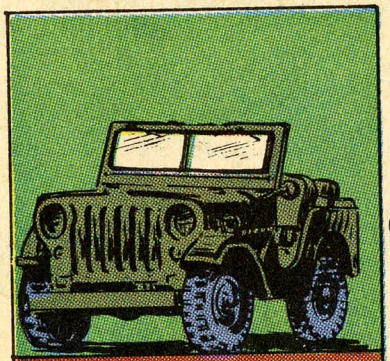



When you get your air to where she's sparkin' steady the reading you'll get will be either good, fair, replace.

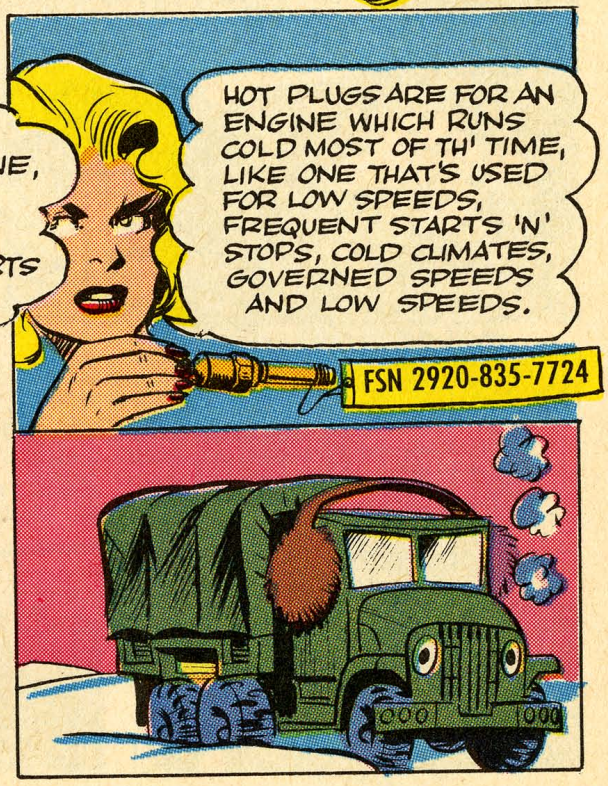


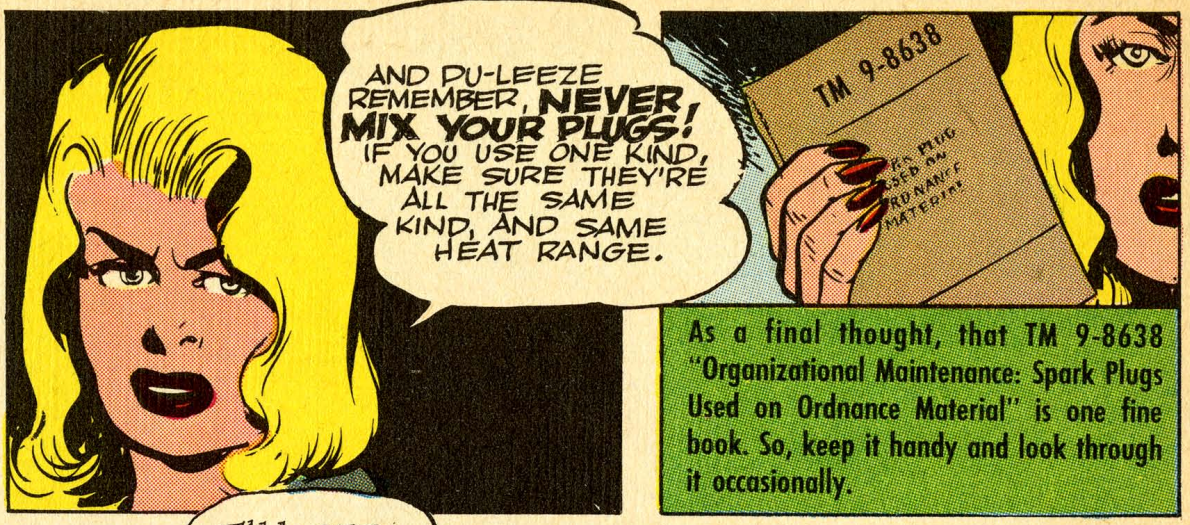

**REMINDER**
WHEN PUTTING PLUGS IN TESTER...
**FINGER TIGHT**
WILL DO FINE... NEVER WRENCH 'EM IN

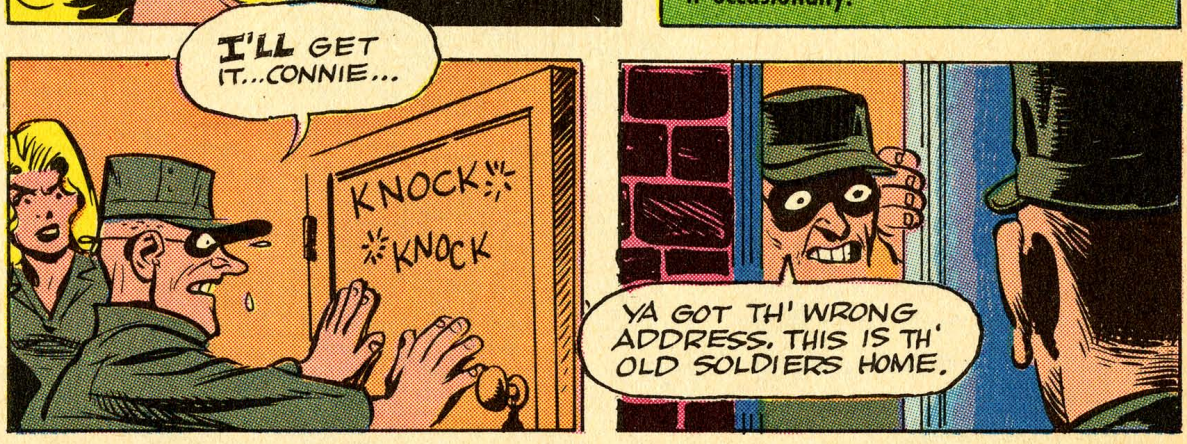
When your trucks roll in for their scheduled services and you take the plugs out for one reason or another, don't throw them away without going through these steps. A few people have the unfortunate attitude that as long as plugs are expendable items, they give all the trucks rolling in new plugs, to heck with the old ones... even an apple barrel runs out of apples sooner or later...

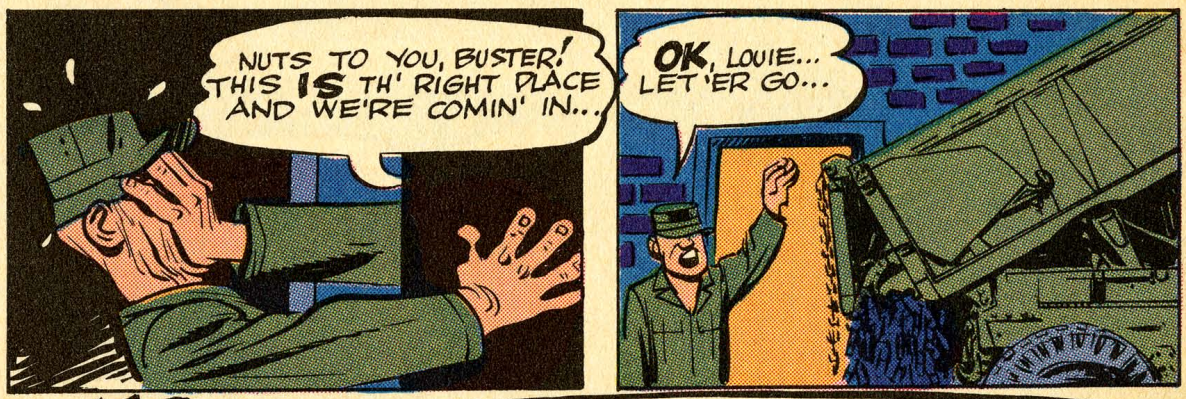


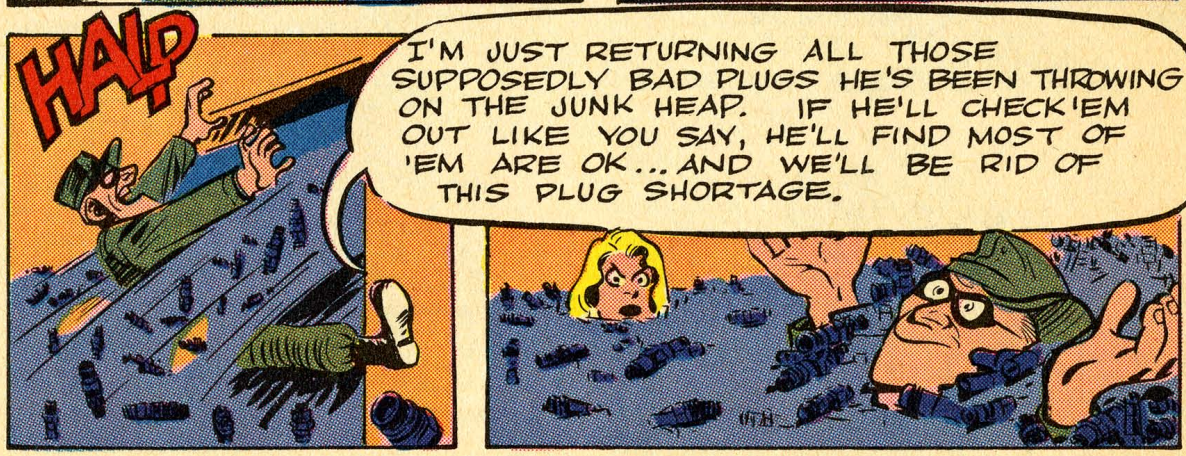
Your M-series wheeled vehicles can take hot or cold plugs... except the G-758¼-ton jeep which only takes the hot plug.

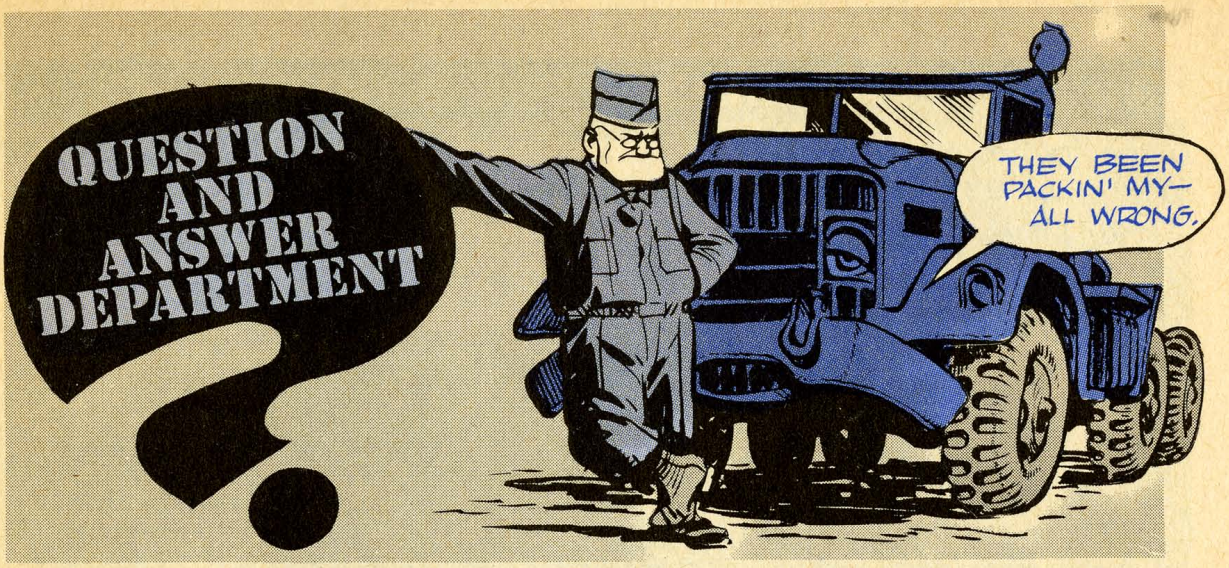



AND PU-LEEZE REMEMBER, NEVER MIX YOUR PLUGS! IF YOU USE ONE KIND, MAKE SURE THEY'RE ALL THE SAME KIND, AND SAME HEAT RANGE.
TM 9-8638
As a final thought, that TM 9-8638 "Organizational Maintenance: Spark Plugs Used on Ordnance Material" is one fine book. So, keep it handy and look through it occasionally.


I'LL GET IT...CONNIE...
KNOCK KNOCK
YA GOT TH' WRONG ADDRESS. THIS IS TH' OLD SOLDIERS HOME.


NUTS TO YOU, BUSTER! THIS IS TH' RIGHT PLACE AND WE'RE COMIN' IN...
OK, LOUIE... LET 'ER GO...


HALP
I'M JUST RETURNING ALL THOSE SUPPOSEDLY BAD PLUGS HE'S BEEN THROWING ON THE JUNK HEAP. IF HE'LL CHECK 'EM OUT LIKE YOU SAY, HE'LL FIND MOST OF 'EM ARE OK... AND WE'LL BE RID OF THIS PLUG SHORTAGE.




## 10-TON WHEEL LUBE

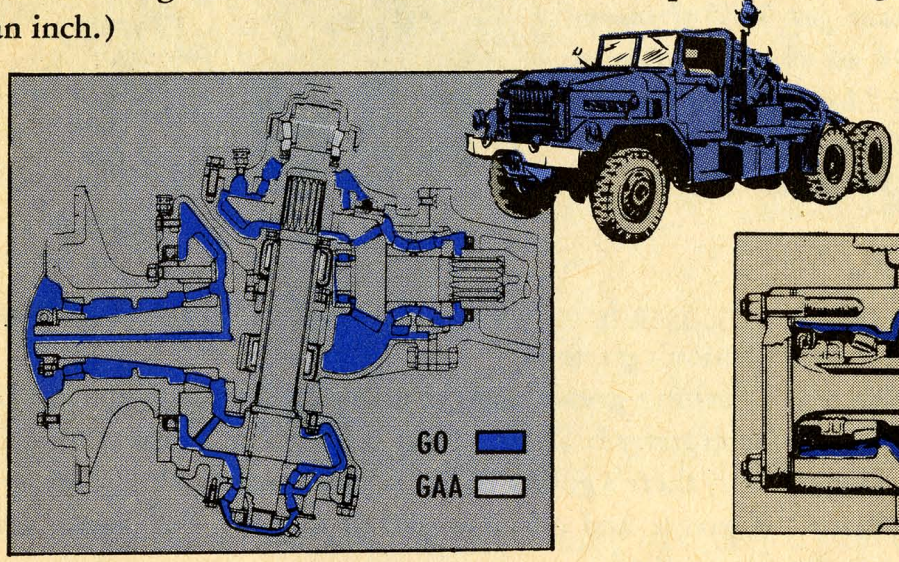
*Dear Half-Mast,*

*What's the story on the rear wheel bearings on the 10-ton G-792 vehicles? Is the lube chart in TM 9-8002 right when it calls for GAA, or are these bearings lubricated with GO 90 like the front wheels?*

*CWO W.F.R.*

Dear Mr. W. F. R.,

Yup, your LO and TM 9-8002 are right when they tell you to repack those rear wheel bearings with GAA. But the latest thinking is that you only put a thin film of grease over the inside of the hub to prevent rusting. (Not over 1/16 of an inch.)




Up front it's different. The steering gear is an integral part of the front wheel drive assembly, and uses GO 90 to lubricate the wheel bearings and reduction gears. GAA is needed to take care of the king pin bearings and upper bevel gear bearings.

Half-Mast

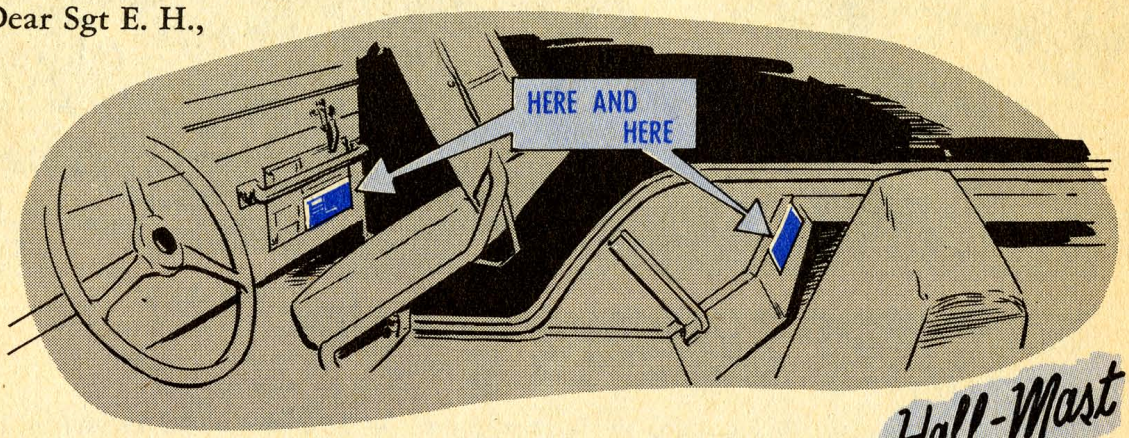
## WHERE'RE THE DIGITS?

*Dear Half-Mast,*

*Where will I find the manufacturer's chassis serial number on the M38 and M38A1 Jeeps?*

*Sgt E. H.*

Dear Sgt E. H.,




Half-Mast

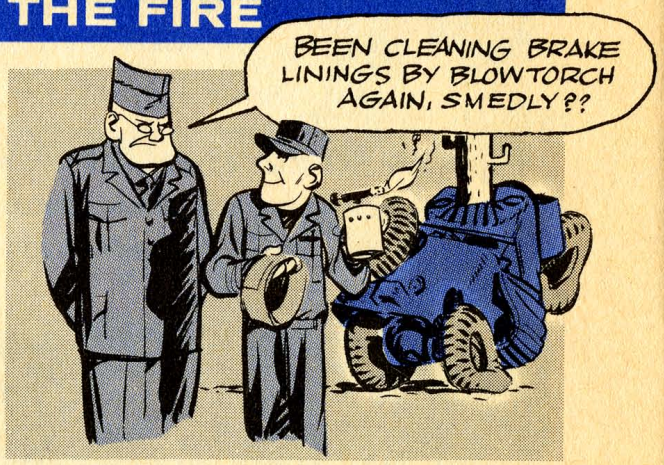
## PUT OUT THE FIRE

*Dear Half-Mast,*

*I remember back in World War II when supplies were scarce at times that we'd burn our brake linings to get grease and oil off them.*

*What we did was get hold of some gasoline and put it on the shoe. Then, we'd set fire to it. The fire would burn away all the grease and oil.*

*Is this still good practice today?*




*MSgt H. U. L.*

Dear MSgt H. U. L.,

Nope—it's sure not. It may have been OK back in those days—a lot of things went during the war that wouldn't go now.

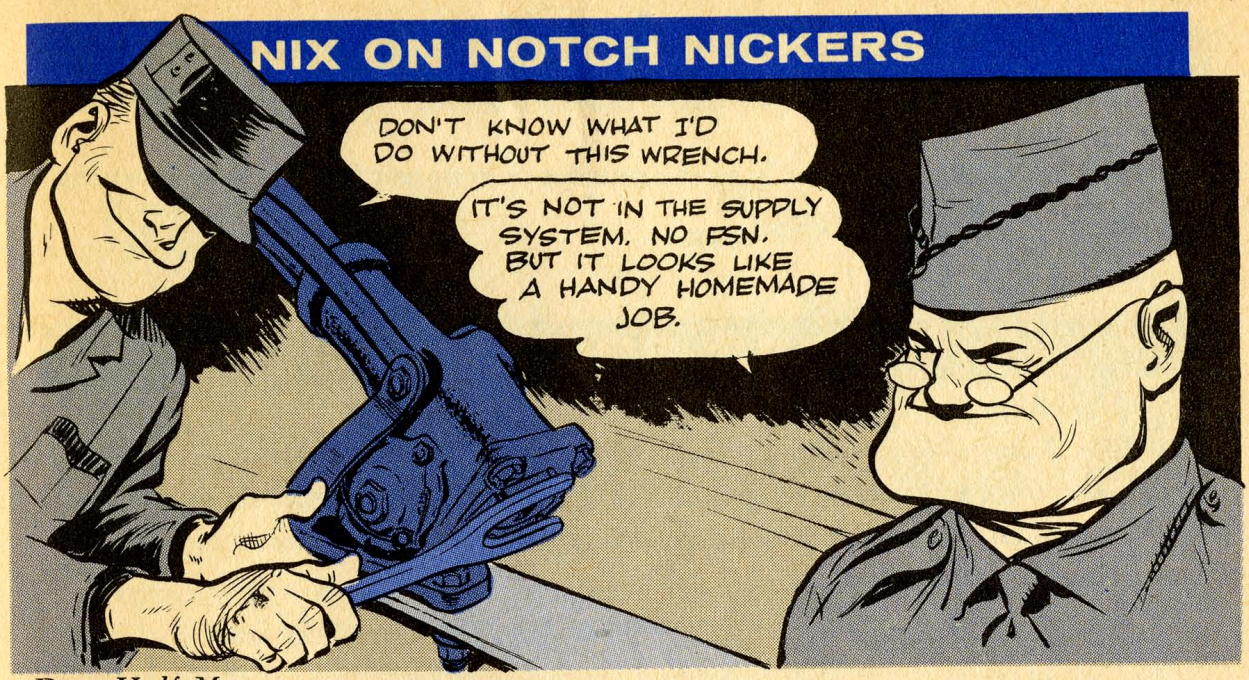
But look at it this way—burning grease and oil off brake linings is much the same as riding with your emergency brake on. Heat reduces the frictional qualities of the lining and eventually there's gonna be one heckuva safety hazard set up.

Why take the chance? If grease and oil have soaked through the lining, get new ones—never use the fire method.

Now, if grease and oil have just coated the surface and haven't soaked through, wash that lining in volatile mineral spirits. Then, let it dry thoroughly.

Half-Mast

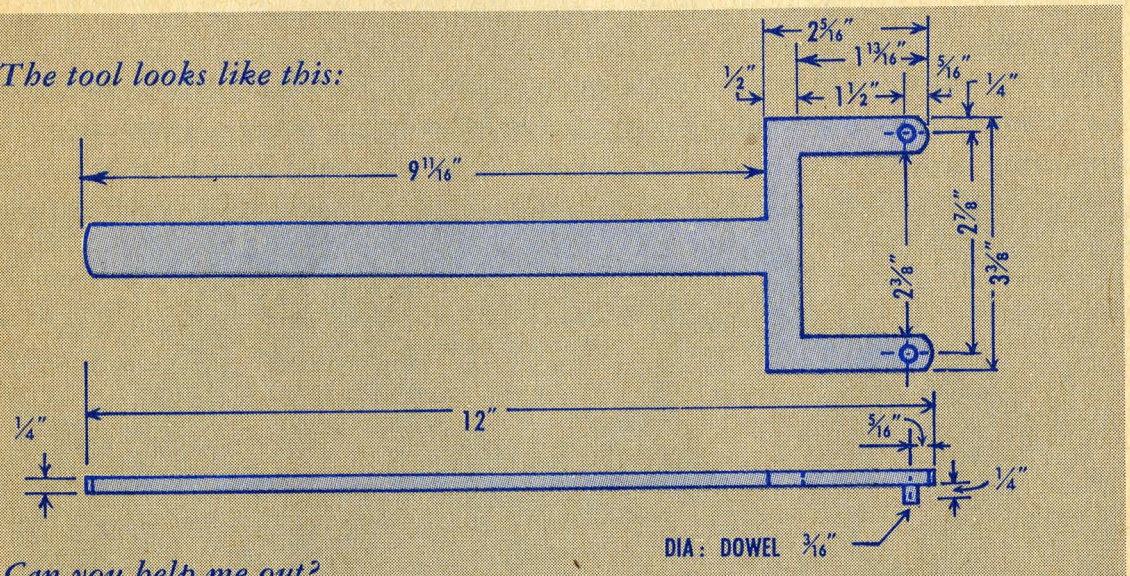
# NIX ON NOTCH NICKERS




*Dear Half-Mast,*

*That notched worm-bearing-adjuster nut in our G749-series 2½-ton trucks gives us a hard time every time we have to adjust the steering. My last outfit used a special type spanner wrench on that nut but no one in my present unit seems to know about the tool, and I can't find its stock number any place.*

*The tool looks like this:*




*Can you help me out?*

*Sgt E. M.*

Dear Sgt E. M.,

That spanner wrench you mentioned must have been a local deal, made from ¼-in plate by your last outfit, 'cause there's no such wrench in the system.

But why worry 'bout what you used to use? If you're real careful, you can do the job just as well by using Driftpin, FSN 5120-754-0840, and hammer to tap the worm-bearing-adjuster nut loose. Tighten the worm bearing adjuster

with a ratchet or flex-bar and Bit, Screwdriver, FSN 5120-277-3600. You'll find these tools in the general mechanic's set. After adjusting, tighten the nut with drift and hammer.

Watch that you don't go nicking the notches in your nut while you're working, though. It's easy to goof up.

*Half-Mast*

## TORQUE ROD WRENCH

*Dear Half-Mast,*

*While doing a little maintenance the other day, a couple of us guys wanted to tighten the torque rods on our G744 5-ton truck. We went to our second-echelon tool kit, but couldn't find a wrench to fit those nuts—it takes a 2½-in open-end wrench to do the job.*

*What we'd like to know is where we can get such a wrench?*

*MSgt T. K. A.*

Dear MSgt. T. K. A.,

Well, let's see now—guess there's not much to tell you except that there's no wrench in the organizational maintenance tool set that'll fit those torque rod nuts. And, according to TM 9-8028 (June 55), you're not supposed to mess with those torque rods anyway without the authority and advice of your supporting Ordnance unit.

Here's what the TM says: "In all cases where the nature of repair, modification or adjustment is beyond the scope or **facilities** of the using organization, the supporting ordnance maintenance unit should be informed in order that trained personnel with suitable tools and equipment may be provided or other proper instructions issued."

Now, a wrench to fit those torque rod nuts is one of the facilities that will have to be provided by Ordnance support.

In other words, Sarge, you only tighten and repair the equipment for which you have tools authorized. When you ask your Ordnance support for a tool, they'll do one of two things—they'll either provide you with the tool to do the work, or they'll do the work for you.

*Half-Mast*

# 100-AMP FAN BELTS

Replacement fan belts for trucks with the 100-amp AC-DC charging system have had some people going around in circles. The big question—how do you replace the belts when they're worn out and when they're not listed in the supply manual?

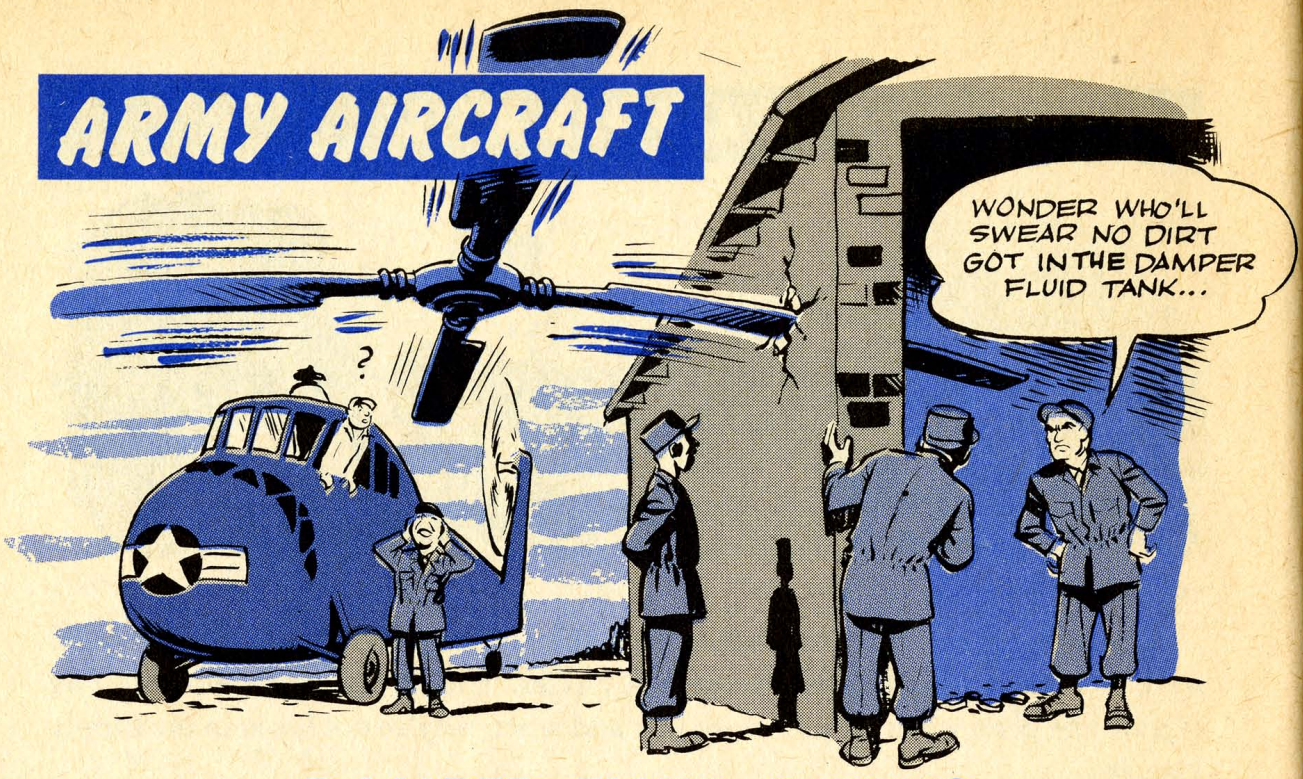
Here's the story: Take the ¼-, ¾-, and 2½-ton trucks which had the 100-ampere system applied as an MWO. The fan belts originally came with the MWO kit, so, as yet, you won't find them listed in the Ord 7.

The MWO replacement part situation was cleared up by SB 9-150 (28 June 57). It gives you the authority to requisition parts and assemblies as repair parts when they do not appear in the supply manuals.

Here's the rundown on fan belts for those trucks:

| TRUCK | MWO Ord | BELT NOMENCLATURE | ORD PART NO. | FSN |
|---|---|---|---|---|
| M38 Jeep | G740-W11 (1 Nov 56) | Belt, fan, set of 4 | 8699837 | 3030-517-0827 |
| M38A1 & M38A1C Jeeps, and M170 Jeep Ambulance | G758-W6 (14 Nov 56) | Belt, fan, set of 4 | 8699837 | 3030-517-0827 |
| ¾-ton trucks (G741 series) | G741-W12 (11 Dec 56) | Belt, fan, set of 4 | 8699828 | 3030-517-0828 |
| 2½-ton (G742 series) | G742-W26 (24 Jan 57) | 1 belt set, fan, set of 4 | 8699832 | 3030-517-0826 |
| 2½-ton (G749 series) | G749-W40 (19 Jan 57) | Belt, fan, set of 4 | 8699833 | 3030-601-7046 |

The supply situation will be taken care of later when new editions of the supply manuals come out. Meantime, get your 100-amp fan belts by using the MWO and SB 9-150 as authorities.




# DAMPER FLUID DIRTY?

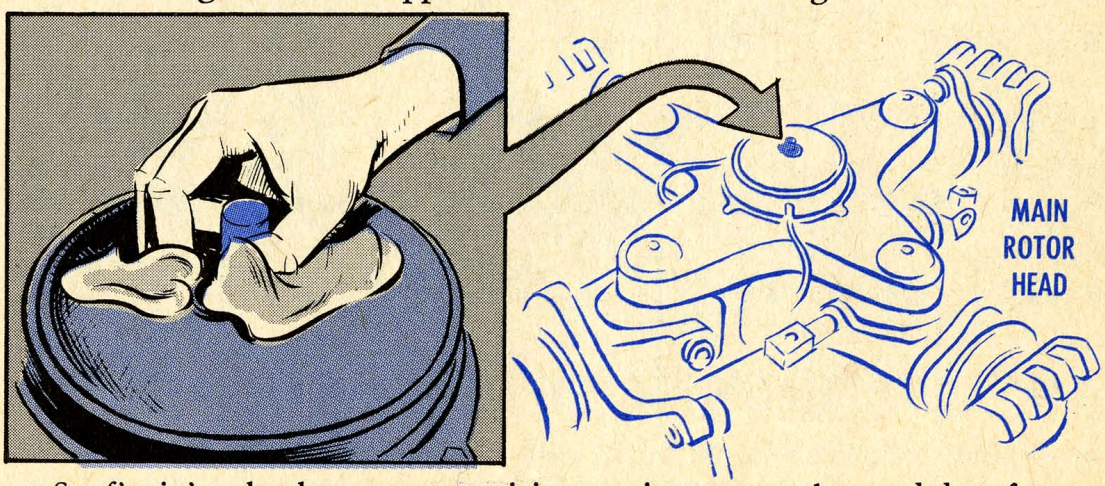
It's been said before, and mebby it should be said again:

Any dirt that gets into your helicopter main rotor damper fluid tank is an invitation to trouble. If a little particle gets into the relief valve, it can hold the valve open.

This knocks out the shock-absorber action of the damping cylinder, which is intended to gently restrain the hunting and drag motion of the blades.

Carried all the way to the end, this could result in crystallization of the blade spar and spindle, due to rough starting and stopping of the blades and unrestrained blade action.

And then guess what happens? You want to be along?

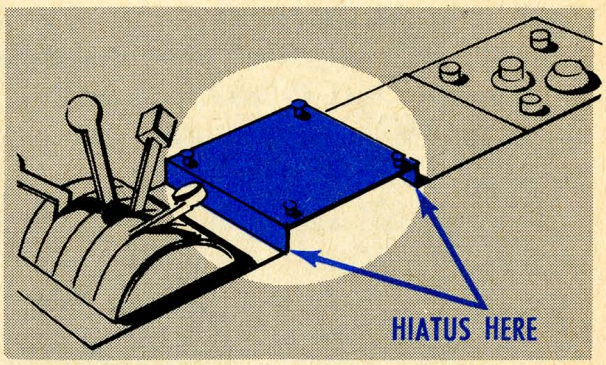



So, f'evin's sake, keep your servicing equipment spotless and dust-free, and be sure you wipe off all dust and dirt before opening the tank filler-cap.

# CHAFF IN Y'R CHICKASAW?

As you Chickasaw (H-19D) maintenance men well know, there are different radio control panels installed in the birds, according to anticipated needs and job assignments. But the consoles are standard, and when some of the space is not used, a panel is used to cover the opening, held down with Dzus fasteners.

This is OK, except that some of the panels, or console cover plates, as they're called, don't fit exactly. Especially the S14-60-2202-1 that covers the hole for the AN/ARC-44 radio control panels on some Chick D's. (H-19D-3's 55-3176, 55-3183 thru 55-3228 and 55-4937 thru 55-4944). This leaves a gap —the eggheads call it a "hiatus"—at the front or rear edge, sometimes at both edges.




Which is not bad, except that it can let small objects fall through. And **that** is bad, because they land in amongst the linkages for the mixture control, shutter control, fuel selector control and carburetor control. And you sure don't want any of these controls jammed when the crew needs 'em. Do you?

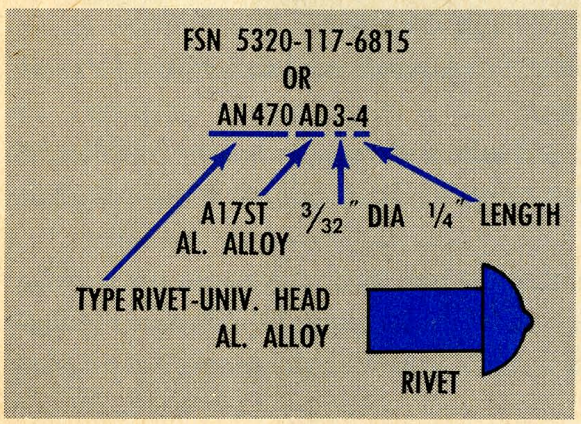
So, you've gotta sorta hand-tailor a couple of aluminum angles to close these gaps. And rivet 'em to the bottom of the cover plates.

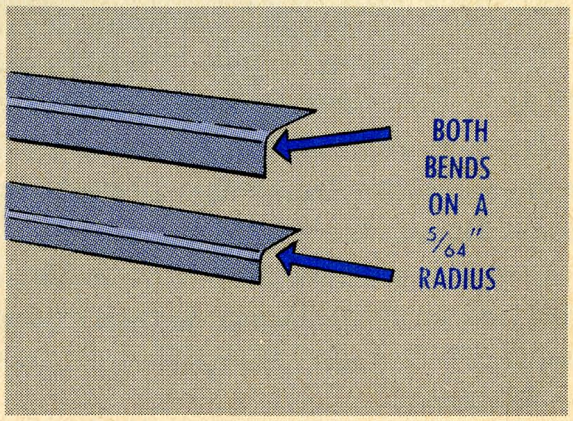
This'll not only save your pet lighter or pencil; it may also save your neck.

Naturally, when you have the covers off you'll hunt out and remove any worn out false teeth, broken thundermugs, etc. that may be floating around. (If you're lucky, you just might find a good address book with hot tips on your RON towns.)

Now, to do the job, you'll need a piece of .032 alclad, (T3), 5¾ inches x 1⅝ inch, one piece 5¾ inches x 1⅛ inch, and ten rivets FSN 5320-117-6815 (Ord).

You bend the wider piece of alclad to form an angle 1 inch on the long side. Bend the narrower piece to form an angle ¾ inch on the side, both bends to be on a 5/64-in radius.



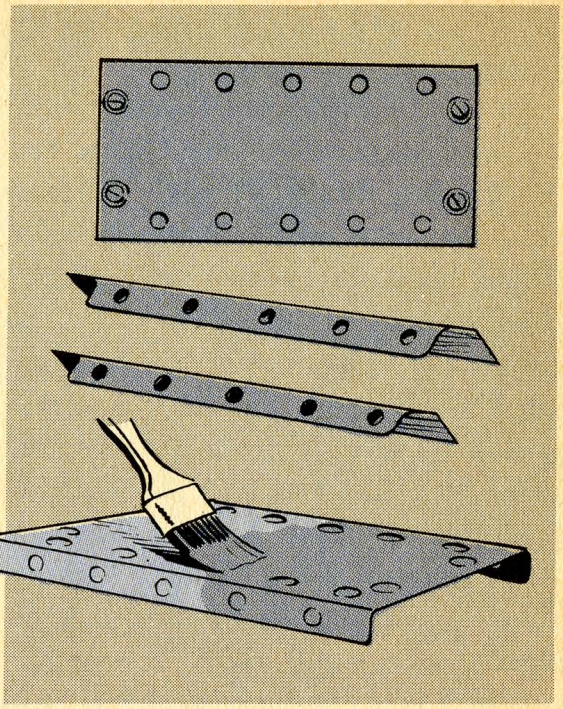
Then, taking the cover S14-60-2202-1 off the pedestal on the radio control panel you drill your ten holes with a #41 drill (0.098 inch). Locate the holes as shown.

Cut a relief in the corners of your angle pieces as shown in the sectional view and rivet the angles to the cover.

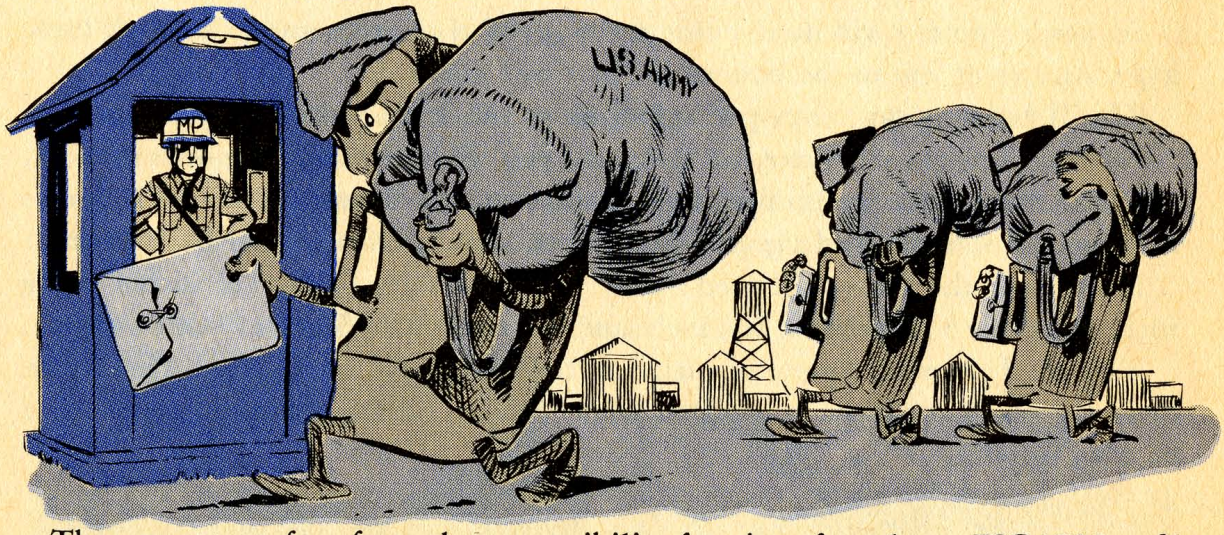
Prime with a coat of zinc-chromate primer, Spec MIL-P-6889, and let dry for at least 30 minutes. Finish coat it to blend with the cover and panel.

Put the modified cover back on the pedestal. Thassall.

The authority for this fix is TB AVN 23-5-14 (1 Nov 57), and keep an eye on TB AVN 23-5.



## TOOLS TRANSFERRED



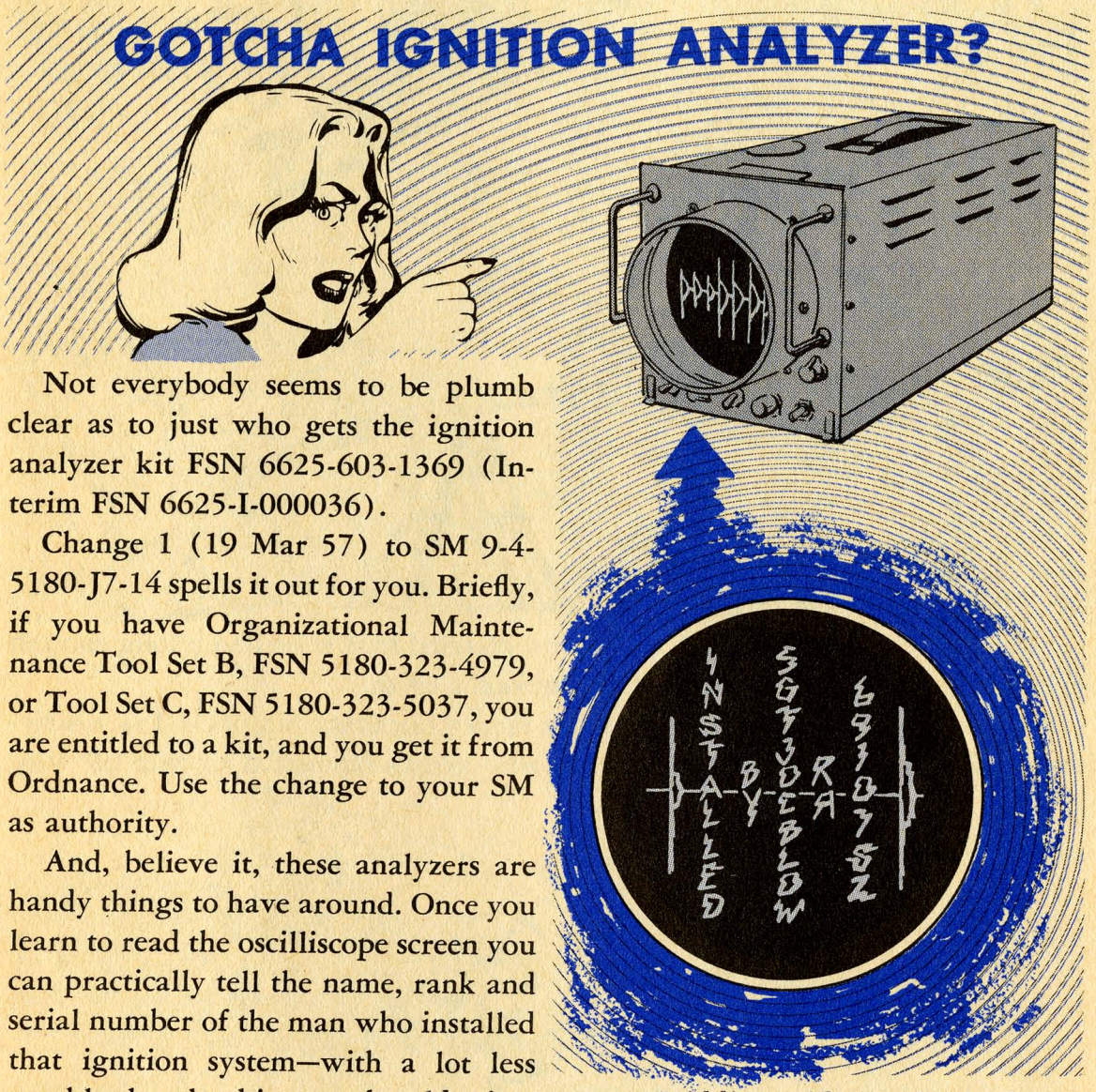

The recent transfer of supply responsibility for aircraft tool sets, FSC 1730 and 4920, seems to have some men on the ropes.

It's easy. Any initial requests for 1730 tool sets that went in before 31 Mar 58 and any 4920 tool sets before 1 July 57 were to go to Ordnance, at Rossford Ordnance Depot, Toledo, Ohio.

Any that were sent in later than that, including any you may come up with in the future, go to the US Army Transportation supply and Maintenance Command, PO Box 209, Main Office, St. Louis 3, Mo., and an information copy goes to Rossford.

But—here's the snapper: Any re-orders of replacement tools, after you have your original issue of the sets, go to the tech service that's responsible for the component you need.

O'course, the directives say that "Army commanders" will so send these requisitions. But you know you'll get faster service if you make sure your immediate supply support knows which way the requisition is supposed to be pointed when it starts off.



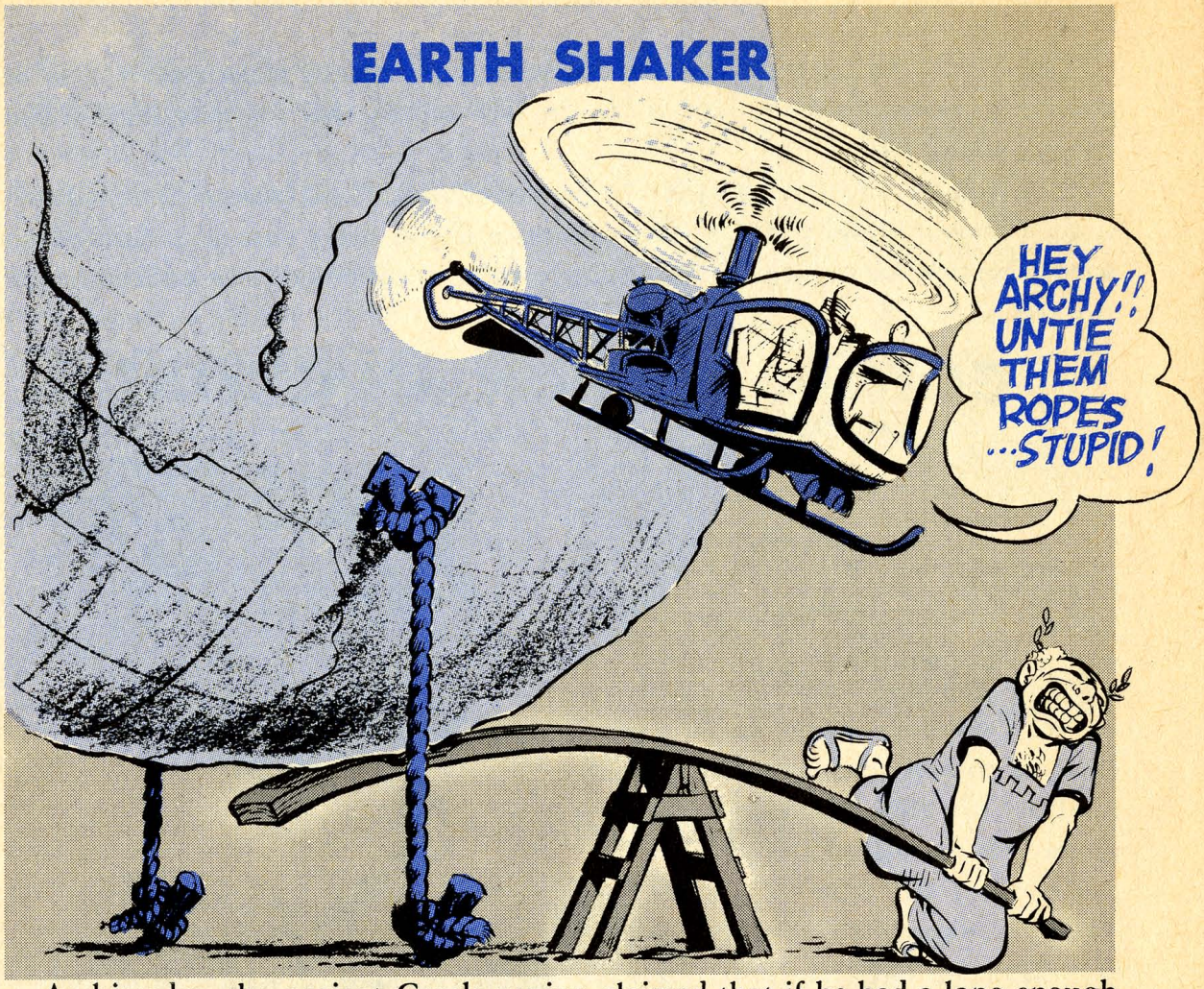

Not everybody seems to be plumb clear as to just who gets the ignition analyzer kit FSN 6625-603-1369 (Interim FSN 6625-I-000036).

Change 1 (19 Mar 57) to SM 9-4-5180-J7-14 spells it out for you. Briefly, if you have Organizational Maintenance Tool Set B, FSN 5180-323-4979, or Tool Set C, FSN 5180-323-5037, you are entitled to a kit, and you get it from Ordnance. Use the change to your SM as authority.

And, believe it, these analyzers are handy things to have around. Once you learn to read the oscilliscope screen you can practically tell the name, rank and serial number of the man who installed that ignition system—with a lot less trouble than hooking up the older instruments. Kidding aside, it will check your secondary circuits for shorts, opens, timing, points, capacitors . . . anything you like, with one or two simple hookups.

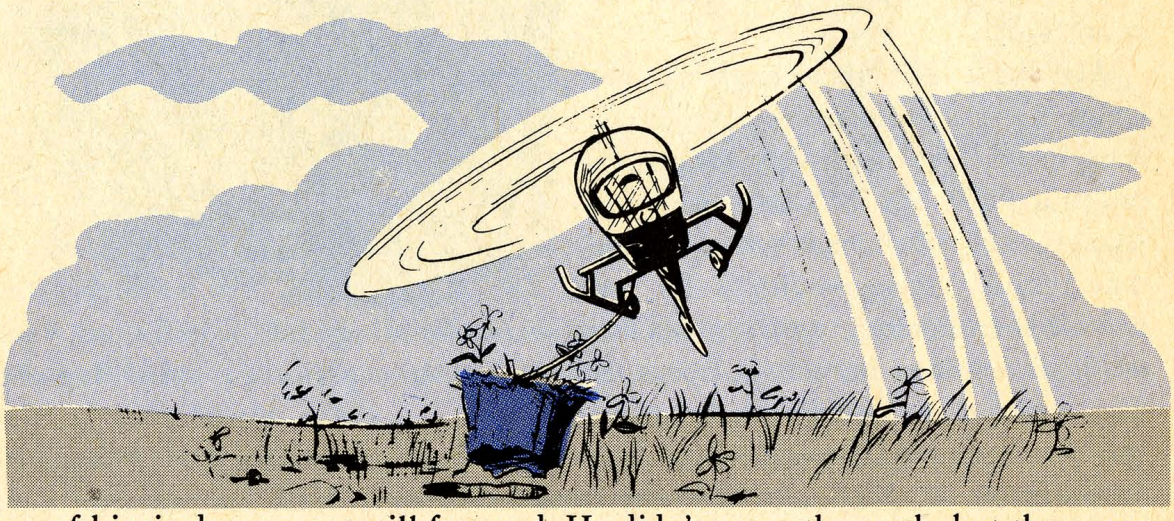
If you have use for one but don't have yours yet, try borrowing one from your support unit. They're authorized the same kit in their Field Maintenance Tool Crib Sets, FSN 4920-321-9397 (Set A), FSN 4920-321-9403 (Set B), and FSN 4920-321-9405 (Set C).

# EARTH SHAKER

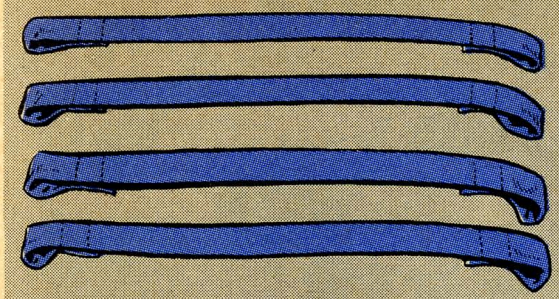



Archimedes, the ancient Greek genius, claimed that if he had a long enough lever and some place to stand, he could move the earth.

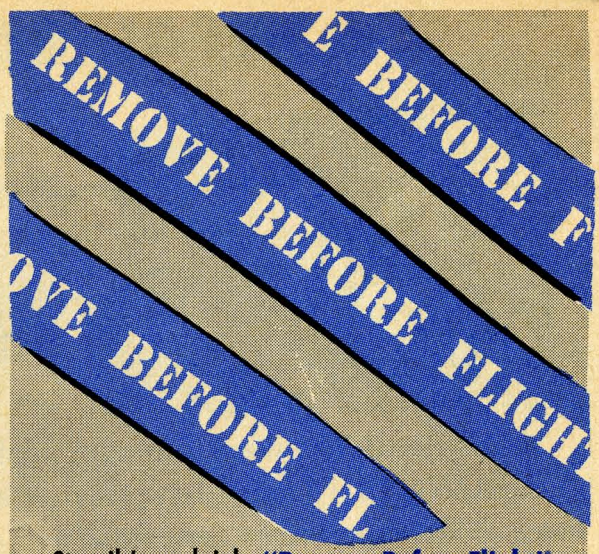
Probably could, too. But just recently it turned out that a Sioux (H-13) whirly-bird is NOT the place to stand. A local non-genius-type tried to take off with



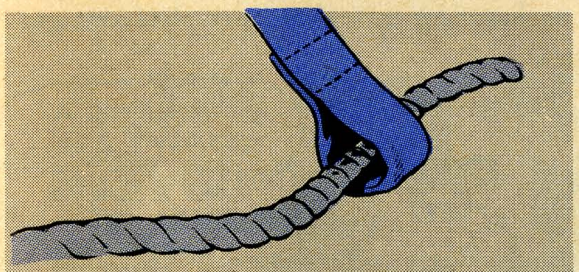
one of his tie-down ropes still fastened. He didn't move the earth, but there was what felt to him like an earth-shaking crash, and he broke his pretty bird all up.



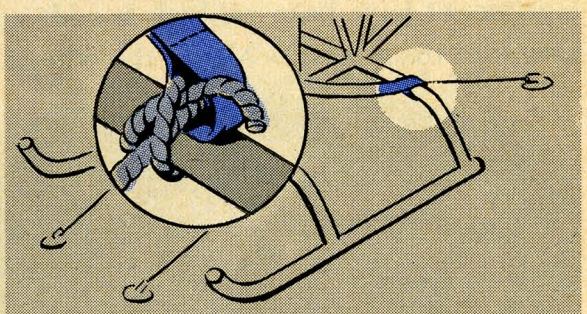
So, happens you're responsible for a Sioux, why don't you glom onto some red streamer material, FSN 8345-340-5670 or FSN 8315-272-9619 and make up four streamers with a loop on each end.



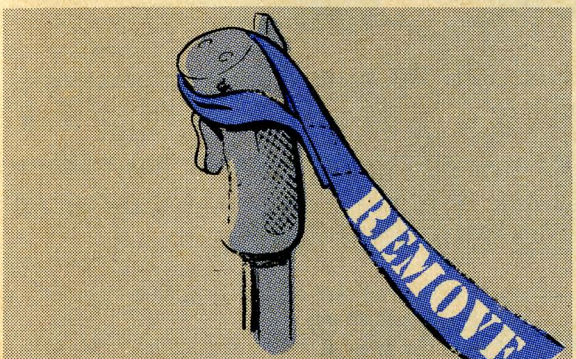

Stencil 'em plainly "Remove Before Flight"



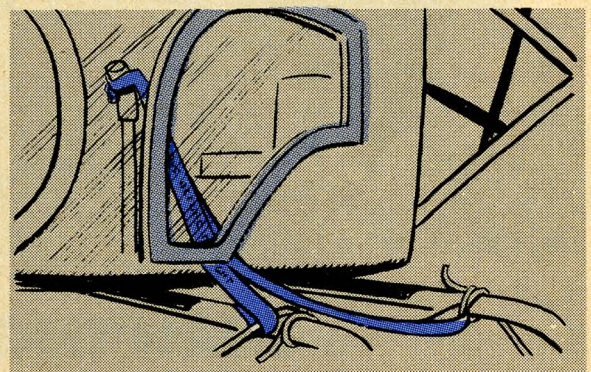
. . . and then when you tie the bird down, slip the tie-down rope through one of the loops.



Tie the tie-down rope onto the skid,

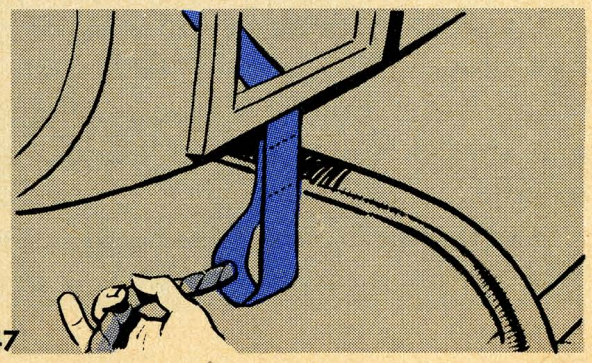



and then slip the other looped end of the streamer over the cyclic control stick handle.

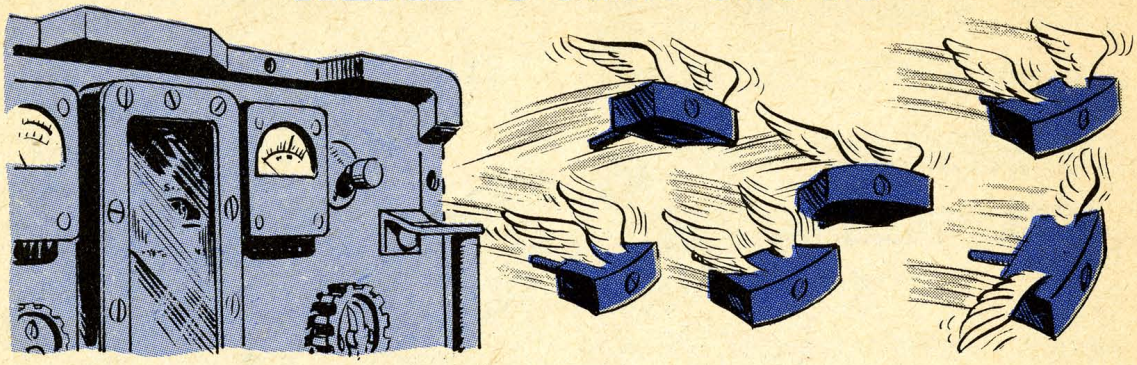


Be sure you have enough slack to let you close the doors.

Then if all hands will remember to take the streamer off at the **tie-down** end **first**, by taking the tie-down rope completely off the skid to allow slipping it out of the looped end of the streamer, there'll be less chance of this particular blooper happening again.

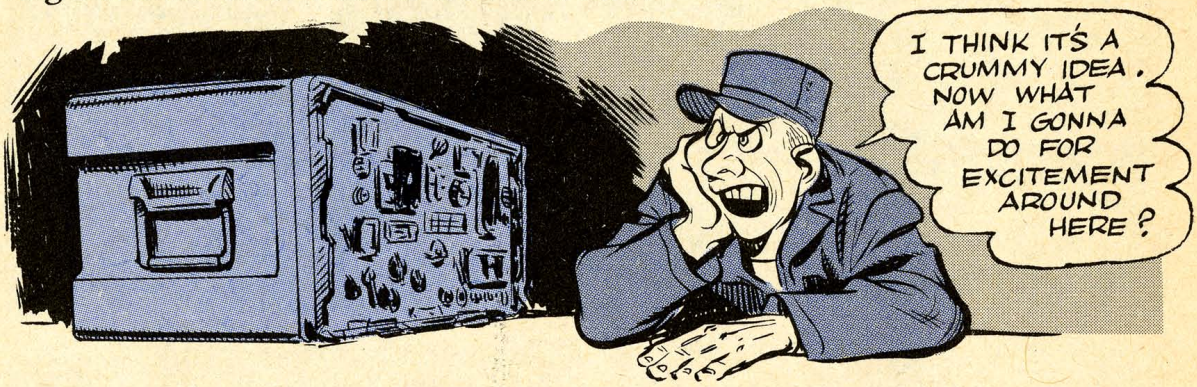


# REAL GONE NUTS



That's right! The wing nuts once used to clamp together the cabinet and panel of the AN/GRC-19 radios have taken wing. They're gone. Been replaced by hex head (Allen type) screw fasteners.

To cinch it, the hex socket head (Allen type) wrenches you used to get with the equipment have been yanked. It adds up to keeping untrained people from getting into those sets. Which is the whole idea.



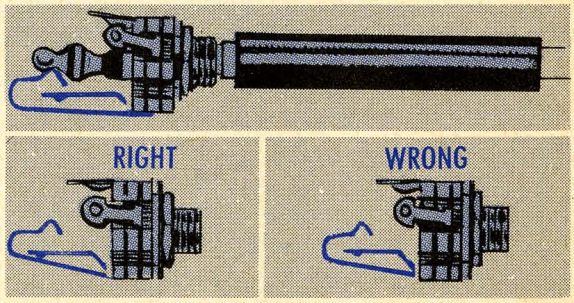

But why get into a sweat? Messing around with the guts of this equipment is strictly for field maintenance people and maybe a qualified second echelon man.

The wing nuts made it a snap for an operator to get in—and that was leading to trouble. Lots of it. So if your Angry 19 needs internal fixing, just shut 'er off and call for the repairman.

# JUMPING JACK?

It's sorta disappointing when you plug in and don't get results.

It's been happening on the SB-22/PT switchboard. The jack (JJ-089) just ain't jacking. That is, it's not opening and closing the contact on the jack switch.

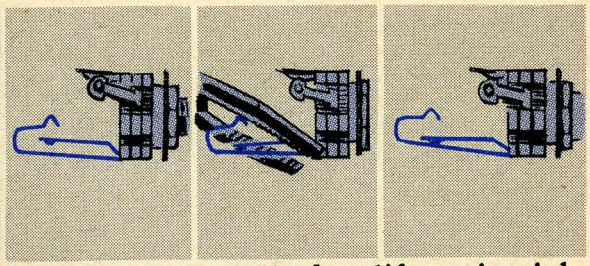



And that means strong language and unkind thoughts at both ends of the line. Worst of all, it cuts way, way down on the life of your batteries.

So throw out the operator's pack? So shut down operations and let your Signal support people sweat over it? So use pigeons?

There's no need for that! Just take off the dust cover and take a look at the jack itself. If the make-and-break contact has been irregular, chances are 100 to 1 that the contact spring on the jack needs a shade more tension.

Just grab a pair of long-nose pliers and bend the spring a fraction of an inch —until you've got that definite make-and-break electrical contact. Have the plug handy so you can push it in and pull it out a few times to be sure.

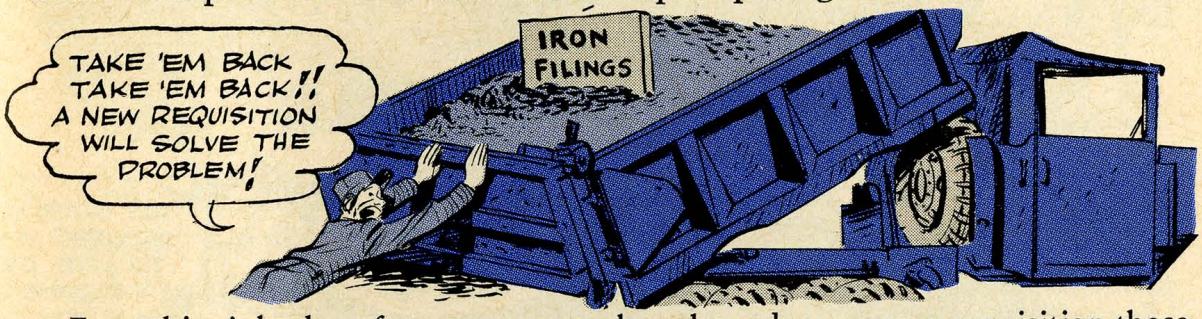


When that jack spring is sprung right, of course, you really do a life-saving job on your batteries. Which is why that jack is there, come to think of it.

# THE CORE OF THE PROBLEM

Been having coil trouble with your AN/TRC-47? Like maybe those coil assemblies you ordered coming through without one pretty important part: the core?

Seems there was a garbled message in the packaging awhile back, and a number of the RF coil assemblies for the transmitter (T-593) came down the line minus their powdered iron cores. A real surprise package.



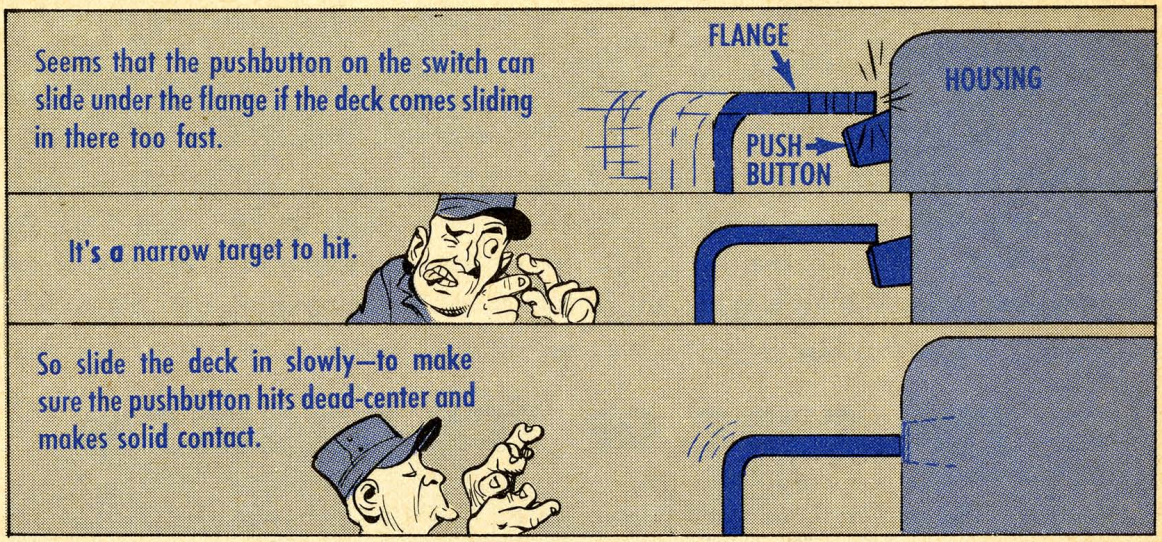

Everything's back on frequency now, though, and you can re-requisition those core-less coil assemblies under the **same** stock numbers and nomenclatures. This time, of course, the coil package will come complete with core.

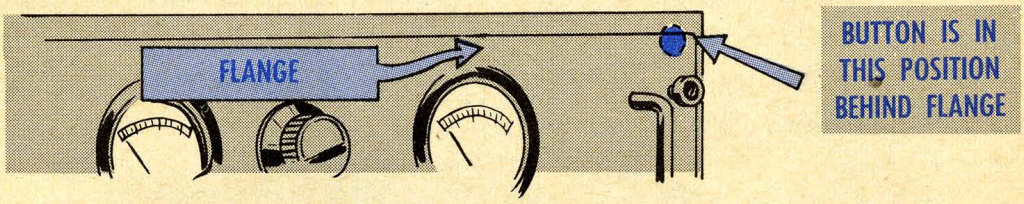
HERE'S THE RUNDOWN:

| | |
|---|---|
| **FSN** 5950-645-9495 | **COIL, RF:** 1 wnd, 28 turns, #28 AWG: $^{17}/_{32}$ in dia x 1¼ in lg. |
| **FSN** 5950-646-0596 | **COIL, RF:** 1 wnd, 14 turns, #23 AWG: $^{17}/_{32}$ in dia x 1¼ in lg. |
| **FSN** 5950-646-0597 | **COIL, RF:** 1 wnd, 5 turns, #22 AWG: $^{17}/_{32}$ in dia x 1¼ in lg. |

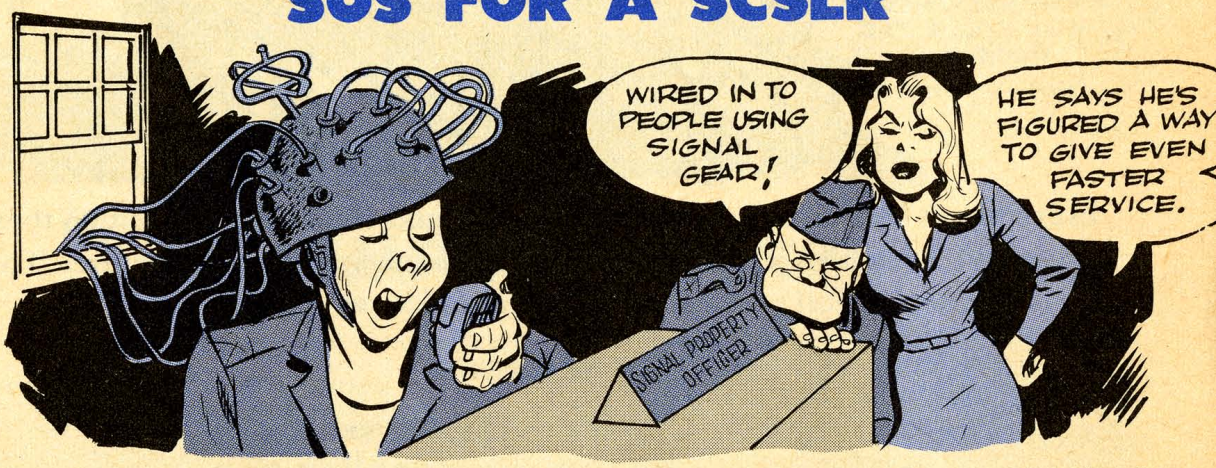
# ON THE BUTTON

If you're getting ready to slide the RF deck of your T-368 radio transmitter into place, watch it! Because sometimes the interlock switch S-14 doesn't make the contact it should.




# SOS FOR A SCSLR




Been scratchin' your head over a tough Signal supply problem? The kind where you ask questions up and down the line and always get a "I don't know, but ask Sergeant Zilch—he might know" kind of answer?

Ask no more. Just get the problem into the hands of a Signal Corps supply liaison representative. They're stationed at every CONUS Signal depot. They're usually on the move, though, ready to see you—and they're loaded with supply

and equipment info. Such things, f'rinstance, as unit supply procedures, speeding up urgent requirements, reviewing TOE and TA Signal equipment, turning in excesses, and lots, lots more.

So next time you're up against a real brain-buster, pass the word to your Signal property officer. He'll get the message to the nearest liaison representative, and you'll have your answer soonest.

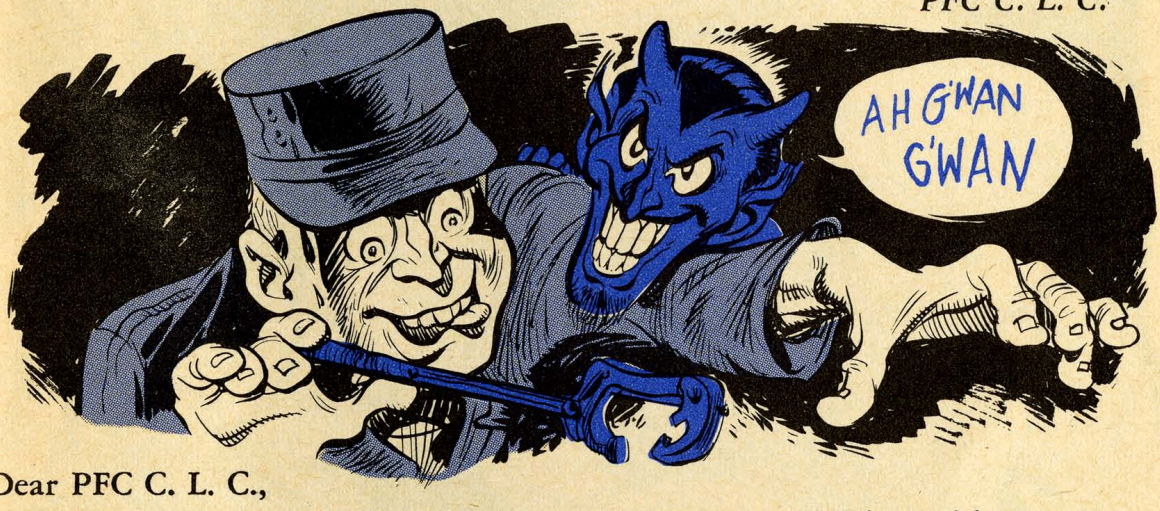
# LOOK AWAY...LOOK AWAY

*Dear Half-Mast,*

*It's mighty tempting! To try a few simple repair jobs on our radio gear. 'Specially when it comes complete with equipment-mounted circuit labels.*

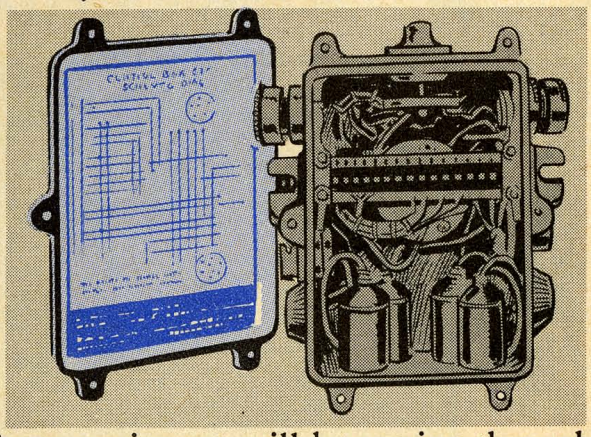
*So I need your advice. Can the operator use the circuit label as his authority to draw some tools for repairs? Isn't that why the label is there?*

*PFC C. L. C.*




Dear PFC C. L. C.,

Hold on, now. I'll admit it's a temptation to try and tinker with your gear using a circuit label as your guide—especially since those labels are mounted for all to see.



But this is one of those deals where the best advice is to ignore the whole thing. Forget that label is there. For one thing, the stuff printed on it is strictly for third echelon or higher.

And for another thing, why ask for trouble? Stick with the TM for any organizational repair and let your support people have their labels.

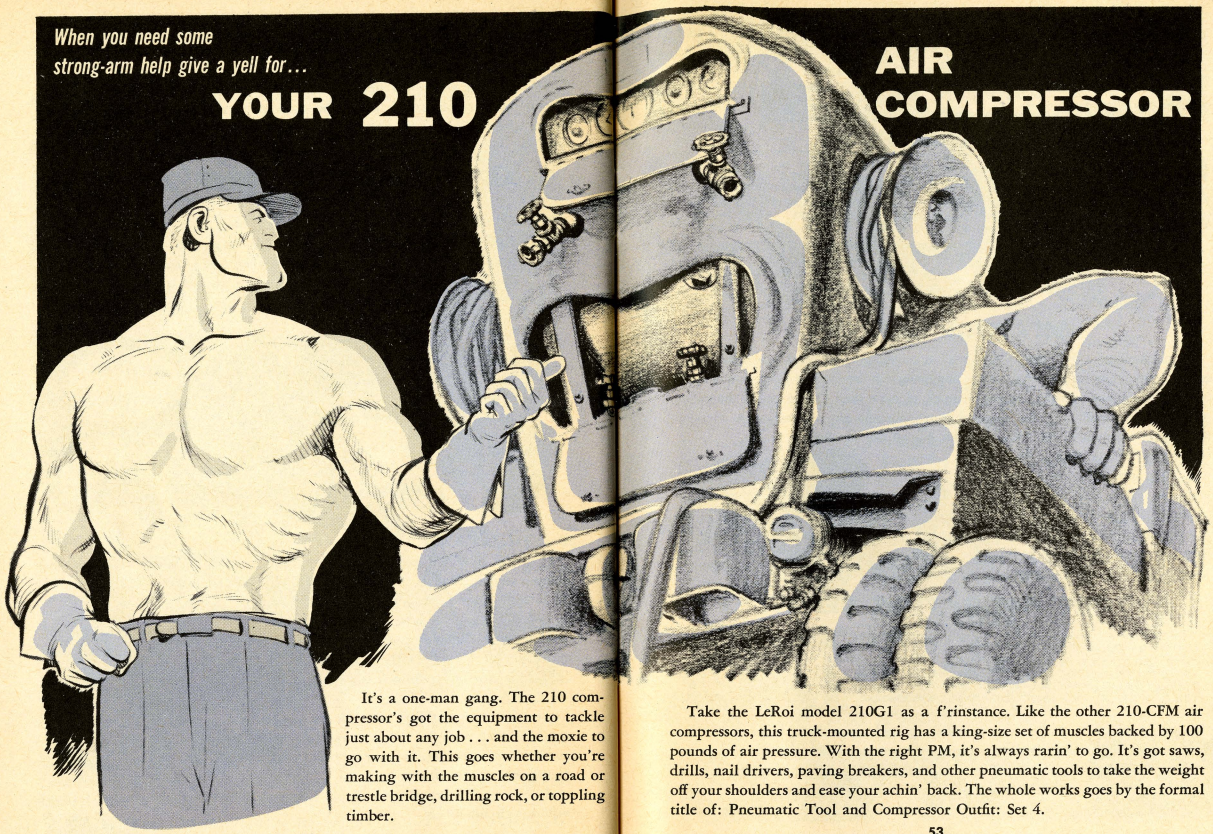
And from now on, all new Signal Corps equipment will be coming through without circuit labels.

*Half-Mast*

It's a one-man gang. The 210 compressor's got the equipment to tackle just about any job . . . and the moxie to go with it. This goes whether you're making with the muscles on a road or trestle bridge, drilling rock, or toppling timber.

*When you need some strong-arm help give a yell for...*

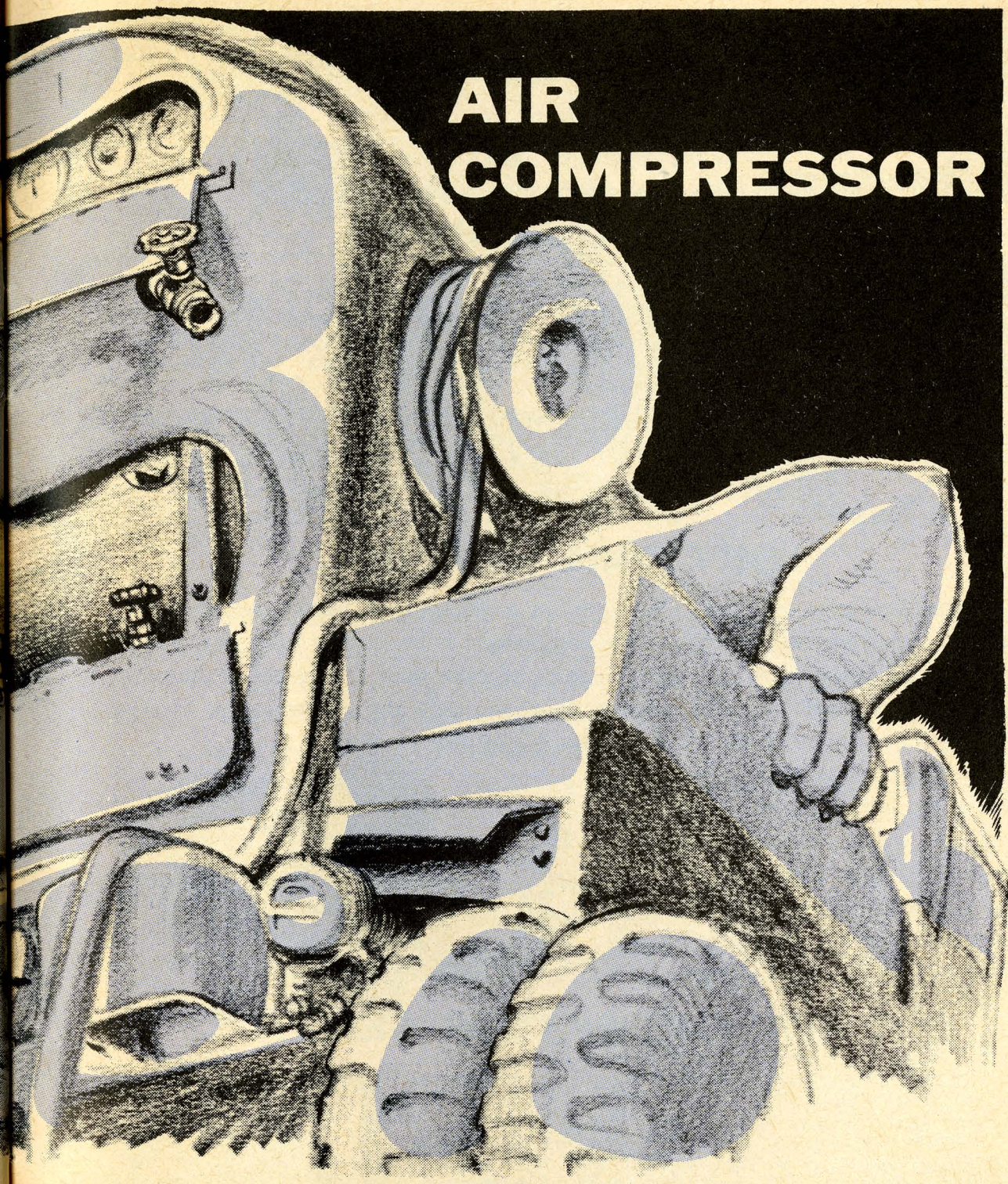
# YOUR 210 AIR COMPRESSOR



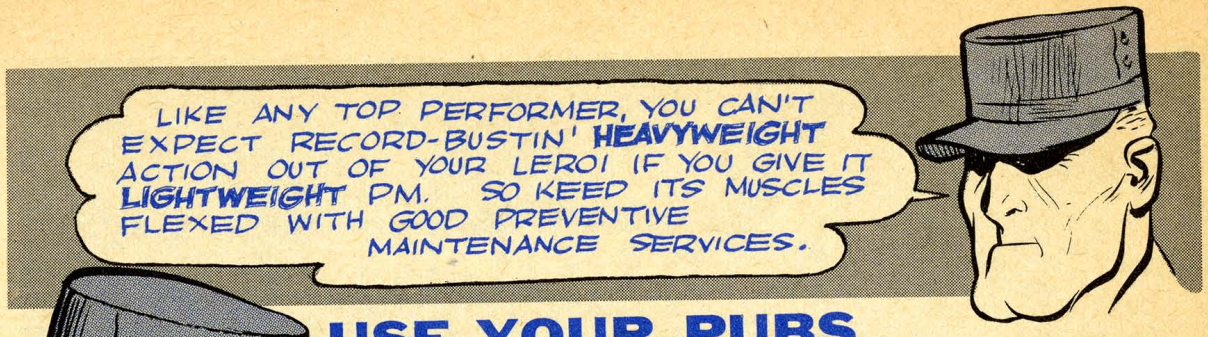
It's a one-man gang. The 210 compressor's got the equipment to tackle just about any job . . . and the moxie to go with it. This goes whether you're making with the muscles on a road or trestle bridge, drilling rock, or toppling timber.



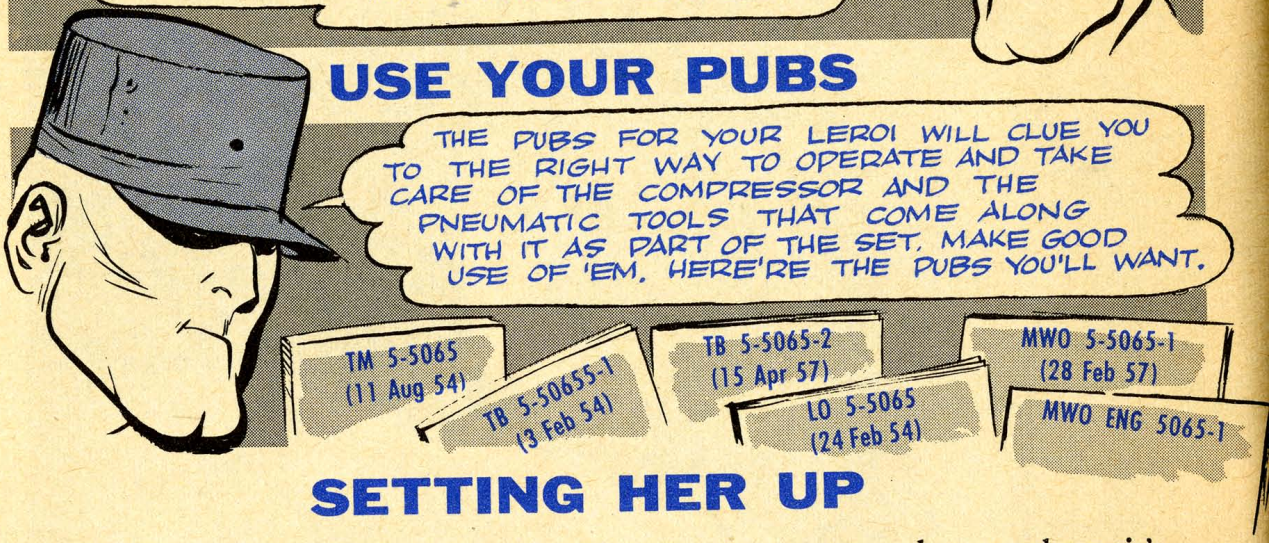
Take the LeRoi model 210G1 as a f'rinstance. Like the other 210-CFM air compressors, this truck-mounted rig has a king-size set of muscles backed by 100 pounds of air pressure. With the right PM, it's always rarin' to go. It's got saws, drills, nail drivers, paving breakers, and other pneumatic tools to take the weight off your shoulders and ease your achin' back. The whole works goes by the formal title of: Pneumatic Tool and Compressor Outfit: Set 4.




Take the LeRoi model 210G1 as a f'rinstance. Like the other 210-CFM air compressors, this truck-mounted rig has a king-size set of muscles backed by 100 pounds of air pressure. With the right PM, it's always rarin' to go. It's got saws, drills, nail drivers, paving breakers, and other pneumatic tools to take the weight off your shoulders and ease your achin' back. The whole works goes by the formal title of: Pneumatic Tool and Compressor Outfit: Set 4.



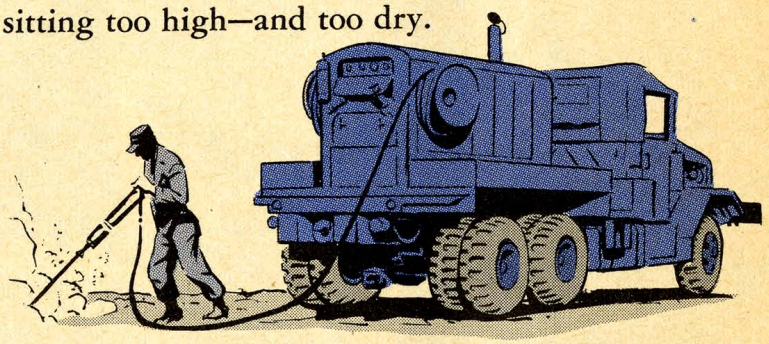

## USE YOUR PUBS



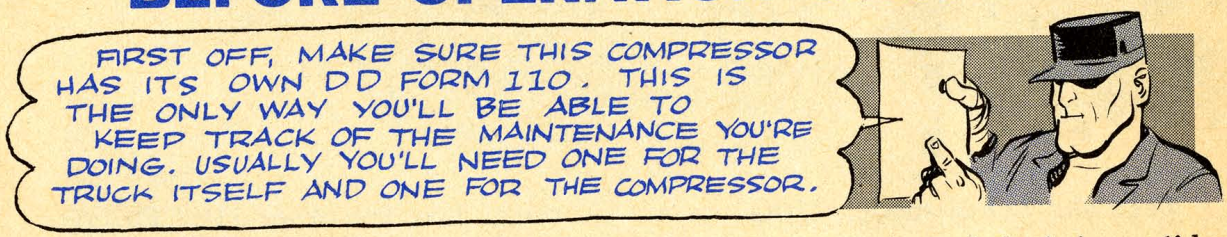

## SETTING HER UP

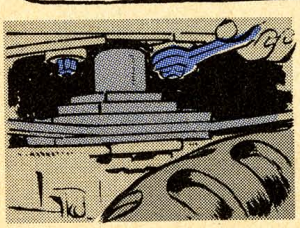
Before you start this muscleman into its strong-arm act, make sure the unit's on the level. Position the truck so the compressor is level. The lube system isn't built to give a good performance at an angle of more than 15 degrees. If the sump pump's sitting high and dry, it's not going to pump any oil—and some parts of the engine-compressor will be sitting too high—and too dry.

Keep the rig as close as you can to the job. This cuts down line pressure loss and the chances of hose stretching in the way of other equipment, or getting pinched between a couple of rocks or tree stumps.



## BEFORE OPERATION SERVICES

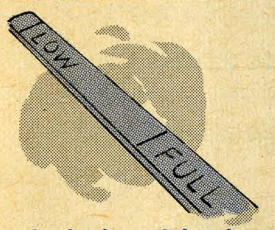


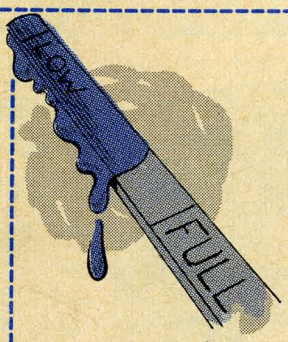
Before you start her up, make sure the unit is sitting solid on its spring mounting—but not too solid. The mounting nuts have to be tight enough to keep the engine-compressor from bouncing when you're traveling out in the boondocks, but not so tight that there's not enough play to absorb the shock.

Fuel, oil and water are next on the list. Your gasoline tank will hold 42 gallons. The fuel gage is right on top of the fuel tank. Fill 'er up before you start your day's work.

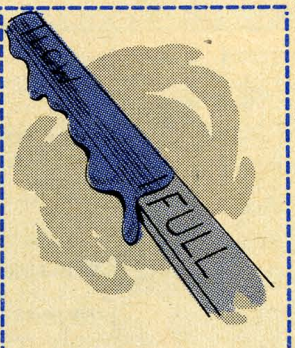
Now for the radiator. Got enough coolant? She'll take 16½ gallons. When you fill it up, don't fill 'er right to the brim. Leave an inch or so for expansion, just like on your car radiator.



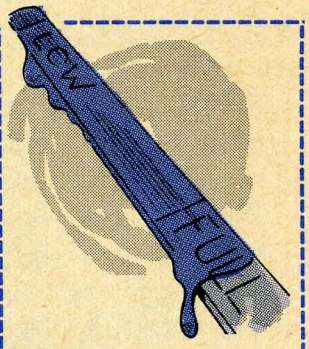

Check the oil level in the engine crankcase. The dipstick has two lines—one reads FULL and the other LOW.




If it doesn't read at least FULL . . .

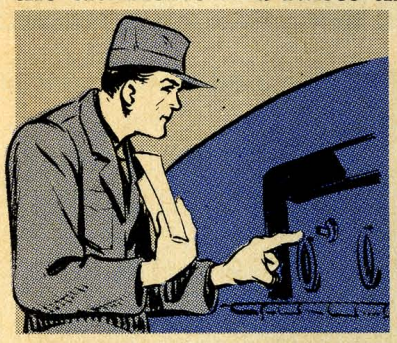



add enough oil to bring it up to that level.



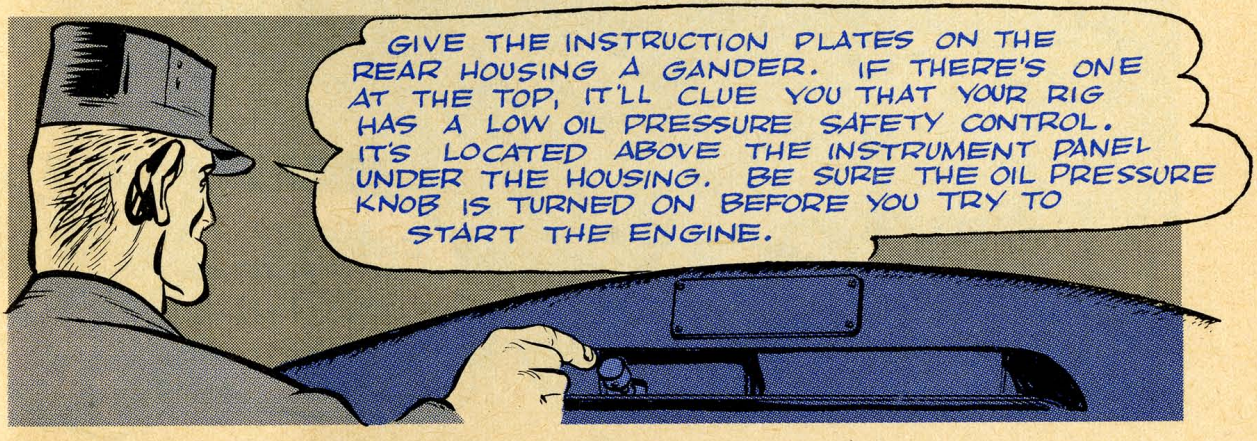

If it's above the full mark, it's OK.

Later, when you start her up, let the engine run for about five minutes, stop it, and check the oil level again. Now, you'll get a "true" oil level reading because with the engine running the oil filter will fill up and bring the oil level down. After the engine has been shut down for awhile, oil from the filter drains into the crankcase and raises the crankcase oil level.

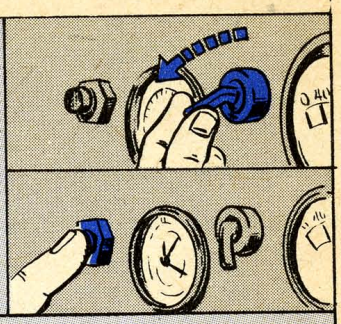


Check for cracked or broken parts and missing bolts. Look for leaks around the radiator and hoses, and the oil and fuel lines. With the bouncing around the engine-compressor takes, the radiator is worth a second look especially around the neck where the hoses connect. You fix—or report on DD Form 110 —any deficiencies before you push the starter button.

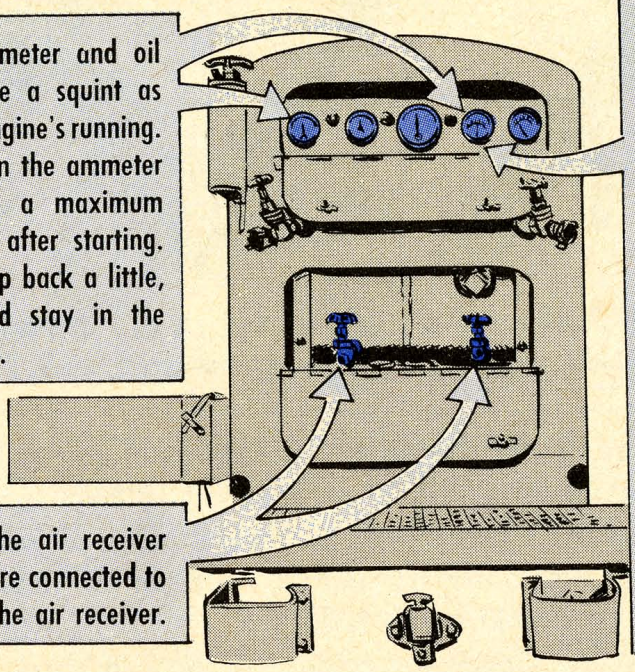
## STARTING



Flip the ignition switch on and push the starter switch. You may have to use the choke until the engine has kicked over and started to warm up. If it doesn't catch the first time, go easy on the starter and don't heavy-thumb it like a doorbell. If you operate it longer than 30 seconds at a crack without giving the starting motor a chance to cool off, it could overheat and burn out.

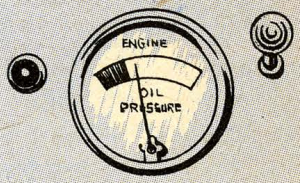


Give the ammeter and oil pressure gage a squint as soon as the engine's running. The needle on the ammeter should show a maximum charge right after starting. Then it'll drop back a little, but it should stay in the charge range.



Now open the air receiver valves—they're connected to the rear of the air receiver.

The oil pressure gage is divided into a red—(no-go)—and green—(go)—area.




The needle should be in the green area all the time the compressor's running. If she ever drops into the red, stop real quick or you'll burn up the engine for lack of proper lubrication.

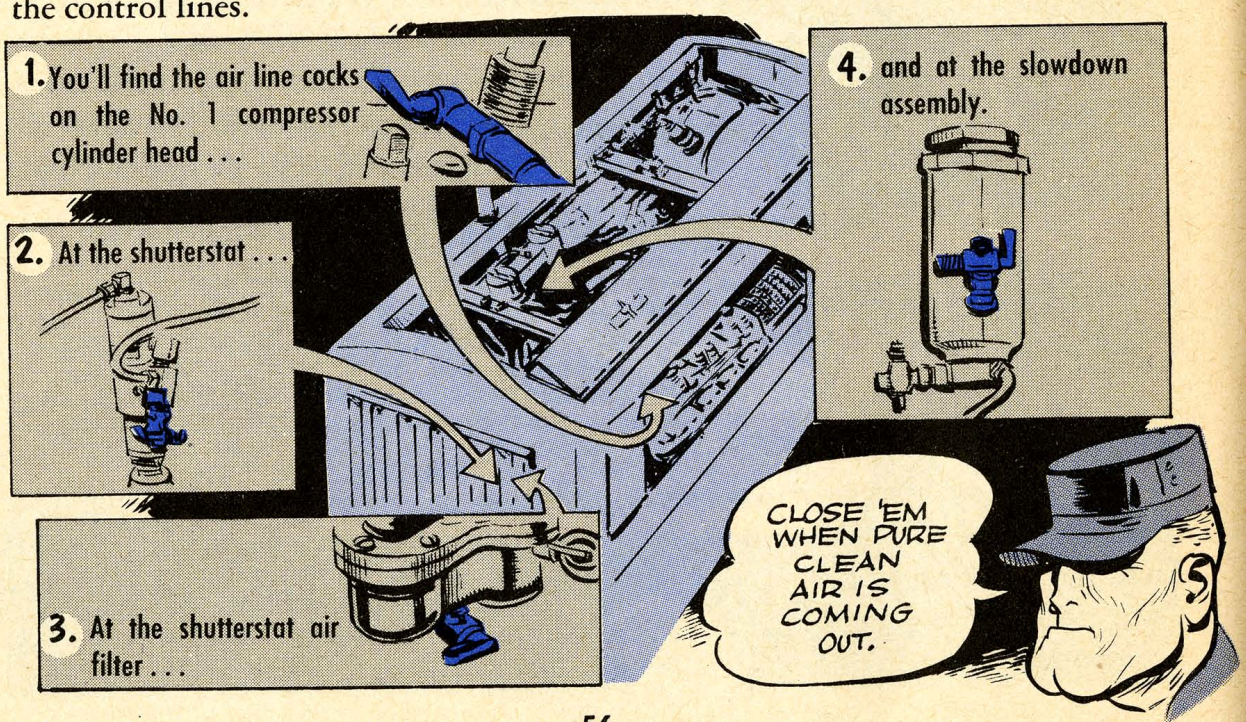
Now you open and close the air drain cocks and blow any condensation out of the control lines.

1. You'll find the air line cocks on the No. 1 compressor cylinder head . . .

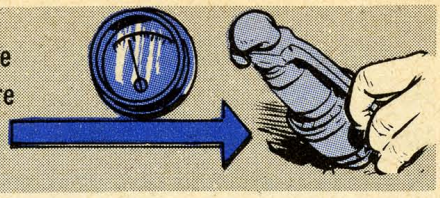
2. At the shutterstat . . .

3. At the shutterstat air filter . . .

4. and at the slowdown assembly.

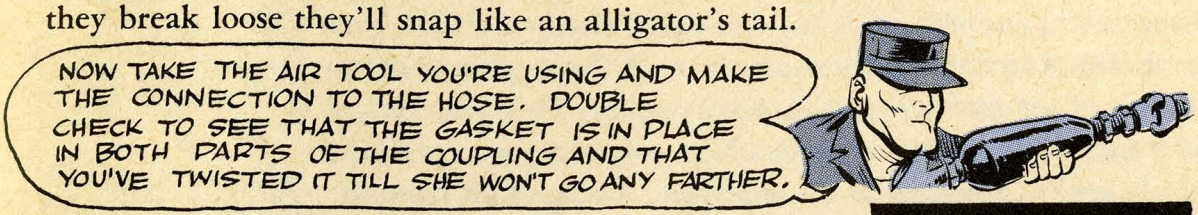


When the pressure reaches 70-PSI on the air pressure gage, give the safety valve the onceover. Operate it by hand to make sure it'll work OK. It should automatically release at 120-125-PSI.

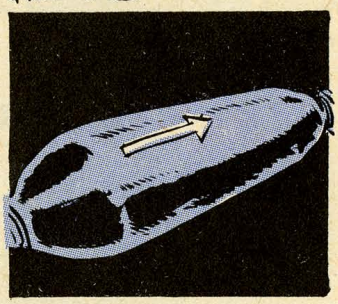


You're ready for business when the air pressure hits 100-PSI and the engine coolant heats up to between 180° and 215°F.

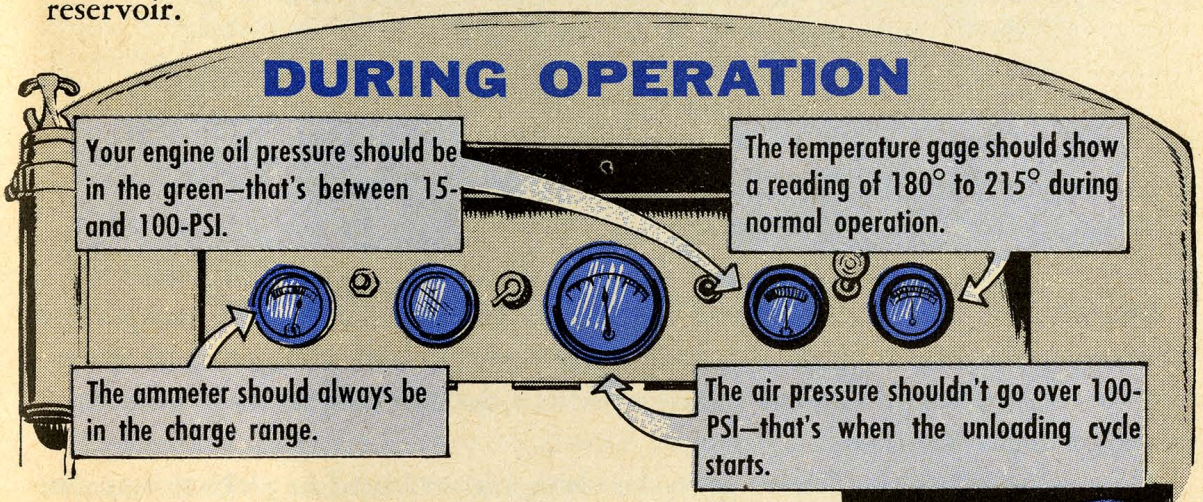
Reel out the hose and inspect it as you go for cracks, worn, or weak spots. If you run up against a bad looking spot—don't use the hose. A hose that breaks under pressure and whips free can make you eligible for the wooden overcoat brigade. Same goes for the hose connections. They have to be real tight . . . if they break loose they'll snap like an alligator's tail.



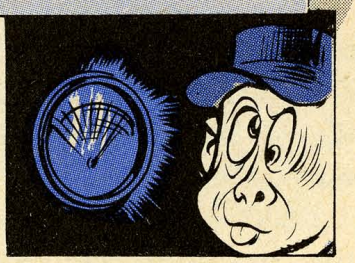

To keep the tools lubricated, connect an air line oiler between the compressor and the tool. The air passing through the oiler carries a fine mist of oil to the inside of the tool being used and keeps it lubed. See that the arrow on the oiler is pointed towards the tool. You don't want to connect the oiler more than 25-ft from the tool you're using.



Check the oiler every couple of hours to see that there's plenty of oil in the reservoir.

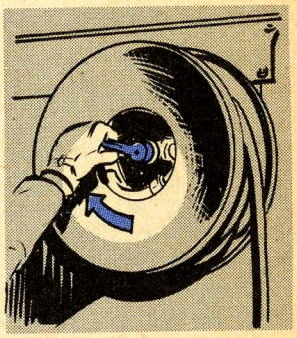



You have to be on the lookout for anything unusual —overheating, smoking, brush sparking, too much vibration, noises. If you spot something that isn't right, shut down the rig and report the deficiency. This goes, too, if any of the gages start acting like a dimestore compass.



Any time that you shut down for a break or take time out for chow, give the fuel, oil, and coolant a check. You also want to make with the "look for leaks" routine. And again, you want to keep a weather eye peeled for broken, cracked, or missing parts. Look over the air hose for damage and worn or broken fittings. If everything's working OK or if something's going haywire, mark your DD 110 so it'll say so.

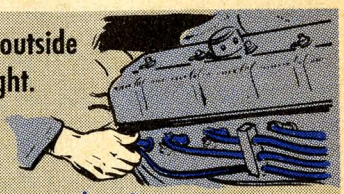
## SHUTDOWN



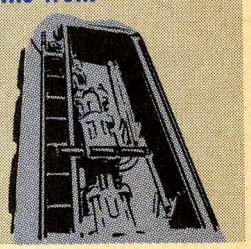
When you're ready to shut down for the day, close all the service valves. Let the engine idle for a couple of minutes to cool down, and then flick the ignition switch off. Now, give each tool a squeeze to blow air through the tool and hose to get rid of any moisture and excess oil vapors. Then you remove the oiler and recouple the hose. Now you can open up all the drain cocks to get rid of the moisture, dirt, and oil from the receiver and lines.

## AFTER OPERATION

Check and refill the fuel, oil, and water. Clean the dirt and scum from the outside of the engine-compressor. Make sure the ignition wires are good and tight.



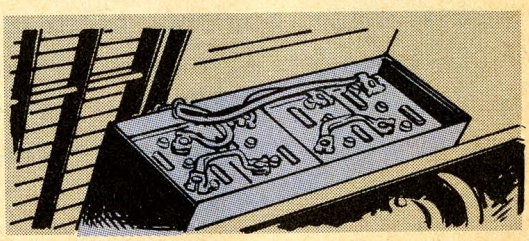
You can get the trash and dirt from the radiator fins by hooking up the air gun that's part of the compressor tool set. Use it to blow the air through the front and out the rear of the radiator.



Take care of the tools, too. See that they're clean, in ready-to-go shape, and that they're stowed the way they should be.

Disassemble, clean, and replace the engine air cleaners and the compressor air cleaners like the LO says. Use the air gun again to blow the gook out of 'em. Use the compressed air to blow 'em clean—that's the only way to do it. You don't use any solvent or cleaner.

Now for the battery. That's gotta be clean and mounted in place to stay. See that it's not leaking. (About once a week check to see that the electrolyte level is ½ inch above the plates.) The terminals should be tightly connected and the vent caps clean and tight.



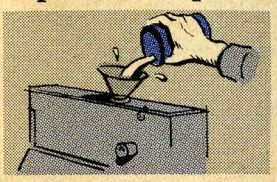
Check out the fire extinguisher for condition, mounting, and charge.

Check the generator belt tension. It's handier to reach from the engine side of the unit. It should have a ¾- to 1-in deflection.

Now close and fasten the top, side and back doors to protect the unit from the weather. Then mark up the After Operation section on your DD Form 110.

## COLD WEATHER CARE

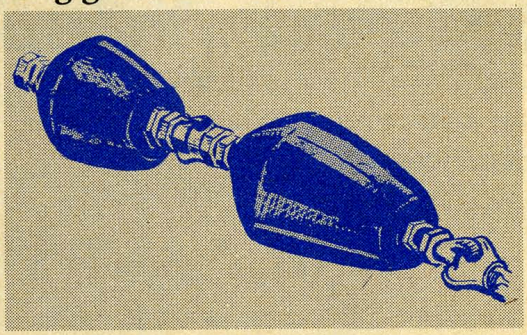
When the temperature drops, it's real important for you to follow your LO right down the line. It'll tell you what lubes you have to use—according to the expected temperature in your area—and also how often you have to lube.



You'll need anti-freeze in your radiator. The info on anti-freeze protection will be passed on down through command channels. Keep 'er filled to the right level (an inch from the top) so you won't lose any by expansion.

You'll want to check the specific gravity of the battery electrolyte real often. In freezing weather, when you add water to the battery, run the engine for about 20 minutes so it'll stay warm and give the water a chance to mix with the electrolyte. Otherwise it'll freeze, expand, and ruin the battery. You recharge the batteries when the corrected specific gravity reading goes below 1.250.

Condensation of water in gasoline, tanks, drums, and containers can be a big problem. If you get water in the engine fuel system, it'll freeze and clog the fuel lines and carburetor jets. Filter the gasoline before filling the fuel tank and keep snow and ice away from the filler cap. Keep the filler caps tight.



When you connect the tools, you can use the air line oiler to add an anti-freeze solution to the air entering the tool by connecting it before the regular oiler. This'll help keep the moisture in the air from freezing in the line or tool.

## SUMMERTIME OPERATION

When the mercury starts climbing to the top of the thermometer, a couple of extra checks are needed to keep your rig cool.

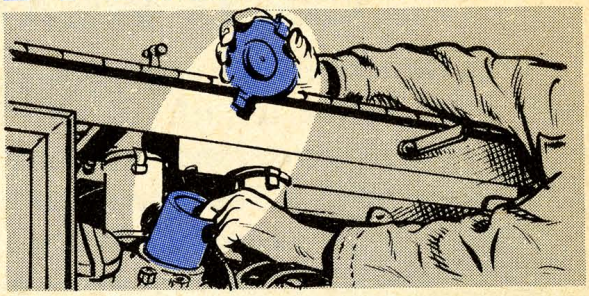
Besides keeping the radiator filled with clean water, make sure the radiator and after-cooler fins aren't blocked by trash, leaves, or other stuff.

Check out the radiator shutters. They should open when the coolant temperature hits 180°F. If they don't open then, your rig'll run hotter than a two-dollar pistol because there's no air flow through the radiator.

When you fill the radiator, do it when the engine's stopped and cool. Fill it to the height of the baffle.

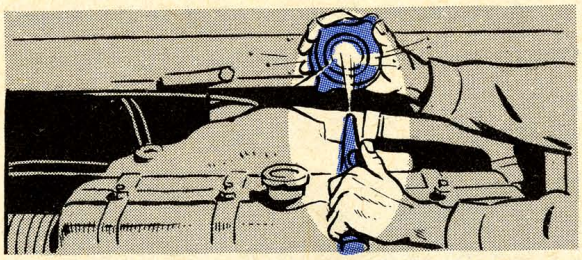
Lube the 210 like the LO says . . . and with the right lubes.

## WHEN IT'S SANDY AND DUSTY



You've got special things to look out for. Dust and sand can be killers. Check out the air cleaners. Take the filters from the engine air cleaner and the compressor air cleaner as often as they get dirty. The filters'll clue you themselves. The dirtier they get, the oftener you have to clean them. Give 'em a good going over each time.

At the same time, make it a real one-two PM combo by taking off the engine oil-filler breather-cap and blowing it out with air. This will help to keep dirt out of the engine crankcase. Don't soak the breather-cap in solvent.



Keep your fuel, oil, and water as dust- and sand-free as you can. Allowing any crum to enter when you're filling the fuel tank, crankcase, or radiator'll only gum up the works.

## IN SALT WATER AREAS

You've got other troubles. When you're near the ocean or in swampy areas, salt water can really sabotage the works. From bolts right up to whole assemblies, it can be plain murder.

All the painted metal surfaces of the 210 unit should be kept that way when you're working near those salty waves. The salt air'll rust bare metal quicker than a chow hound runs for seconds.

When you clean your engine at the end of the day's operations, keep right on going and wipe down all the metal surfaces of the whole compressor unit.

Give the electrical connections a coating of vaseline—the same stuff that you use to keep your battery terminals clean. This'll stop 'em from corroding and from shorting out.

Now, in addition to your regular lube, put a couple of drops of engine oil on the control linkage connections and the compressor support springs.

If your rig happens to get a good bath in salt water, get in touch with your Engineer support unit. The field maintenance guys'll have to take over for you from there.

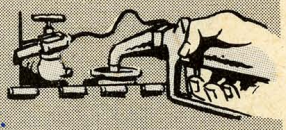
# SAFETY PRECAUTIONS

Don't balance yourself at the very end of the compressor or on the edge of the bumpers while you're reading the gages or starting the unit. Mount the unit from in back of the cab—and use the handrail.

Keep your head or any body openings out of the way of the air receiver and service valves. A 100-PSI blast of air can make you a candidate for sick call —it's real dangerous. At close range the air pressure can put out an eye, split ear drums, and make skin blister.

Fix or report any mechanical defect right away.

Don't adjust, lube, or repair the rig while it's in operation.



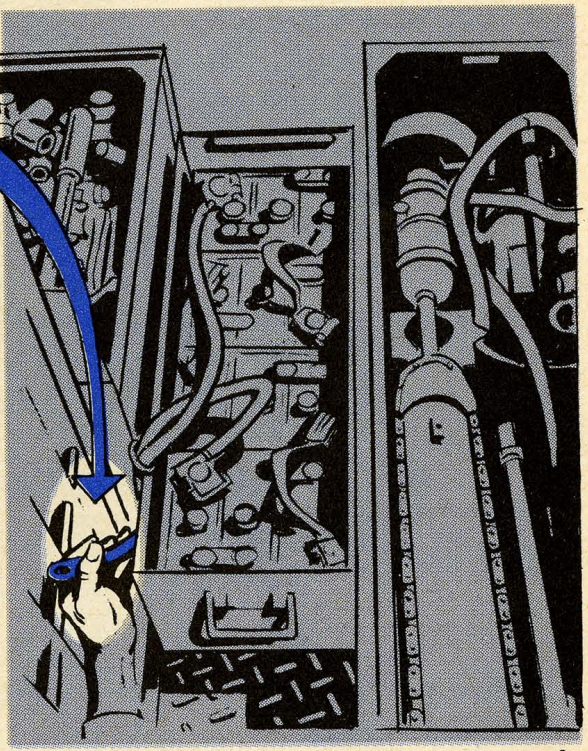
Keep the electrical equipment clean and dry.

Use a metallic contact between container and tank when filling the fuel tank.

Take care of your 210 air compressor—and it'll do a lot of back-bustin' work for you.

# CUT THE JUICE

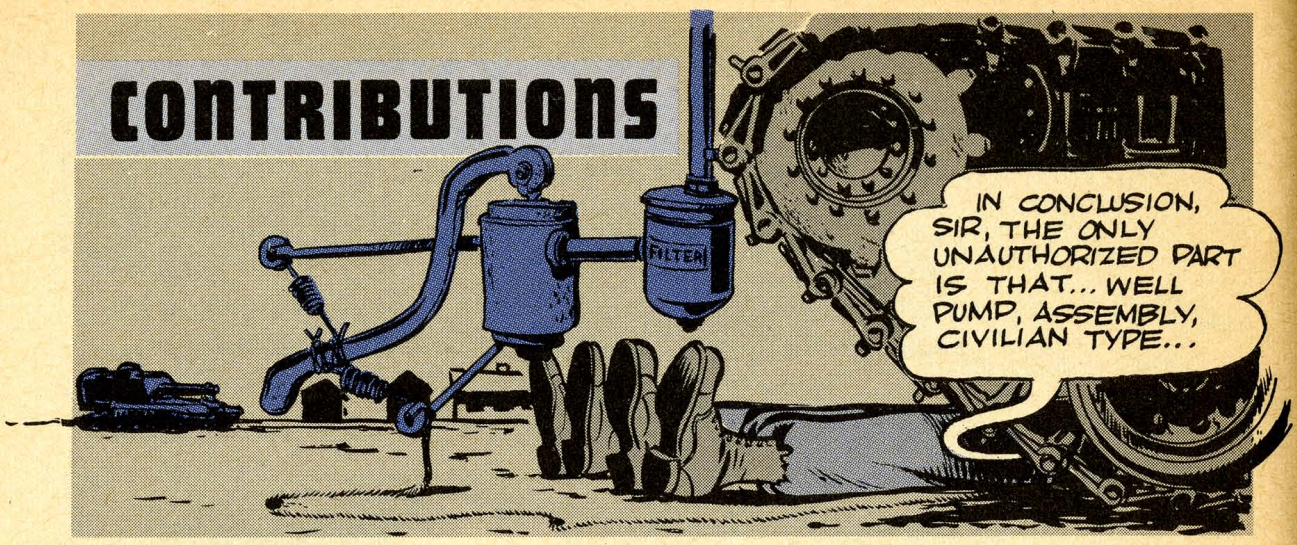
DISCONNECT GROUND TERMINAL OF BATTERY BEFORE YOU WORK ON FUEL LINE.



As you compressor operators know, the fuel line on the LeRoi 210G1 truck-mounted air compressor goes right above the starter relay solenoid.

So, when you replace the line or tighten the fitting at the fuel supply you have to work real careful like. If your wrench slips or you drop it, the odds are it'll bang against the terminals on the solenoid. You'll get a spark . . . maybe a fire.

So, before you go to work on the fuel line, disconnect the ground terminal of your battery. You can count on being in the payline each month if you do.




## POOPED PIPE

Dear Editor,

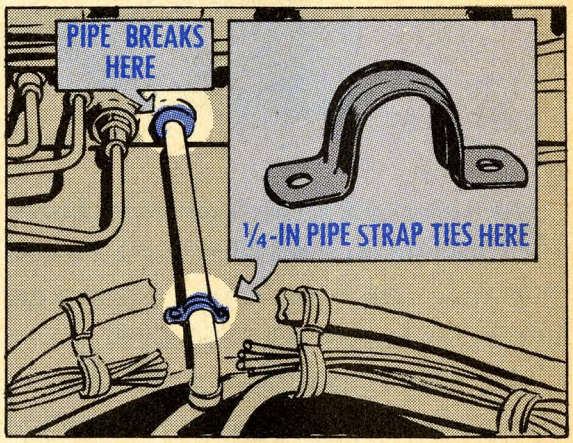
We were going off our rockers because of the mess made by dripping oil from our M44 self-propelled howitzer's hydraulic power-pack reservoir drain pipe.

We got the word that two wrenches were needed when somebody takes out the plug. It was useful to know that both wrenches had to be used because the pipe was left suspended in mid-air after it had been inserted into the reservoir. This practice has stopped the pipe from twisting while taking out the plug and kept it from being busted.

Since that was helpful to us, we'd like to pass on to you something else in the same line that might save a lot of trouble for other M44 crews.

The guys found out that this same pipe takes such a beating from vibrations that the pipe breaks where it goes into the reservoir. So we got permission from our Ordnance officer and fastened a two-hole ¼-in pipe strap between the cable assemblies. The pipe rests on top of a metal block (about ⅝-in thick) and is held down by bolts.

The strap is listed under FSN 5340-195-7271 (Eng). It does the job.



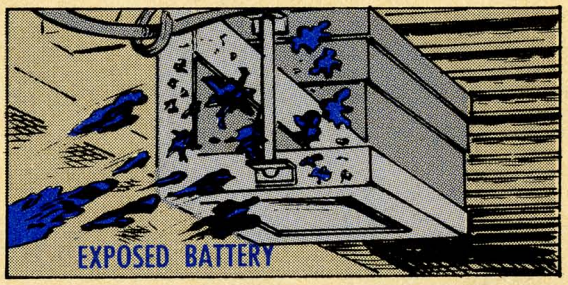

**Two Howitzer Handlers**
**APO, New York, N. Y.**

*(Ed Note—You guys are really on the stick. It sounds like a good idea. And your Ordnance officer has the authority to back that decision by exercising his rights under AR 750-5 (28 Oct 57). A little trick like that can sure save a power-pack plus mopping up a mess.)*

## THE SHIELD

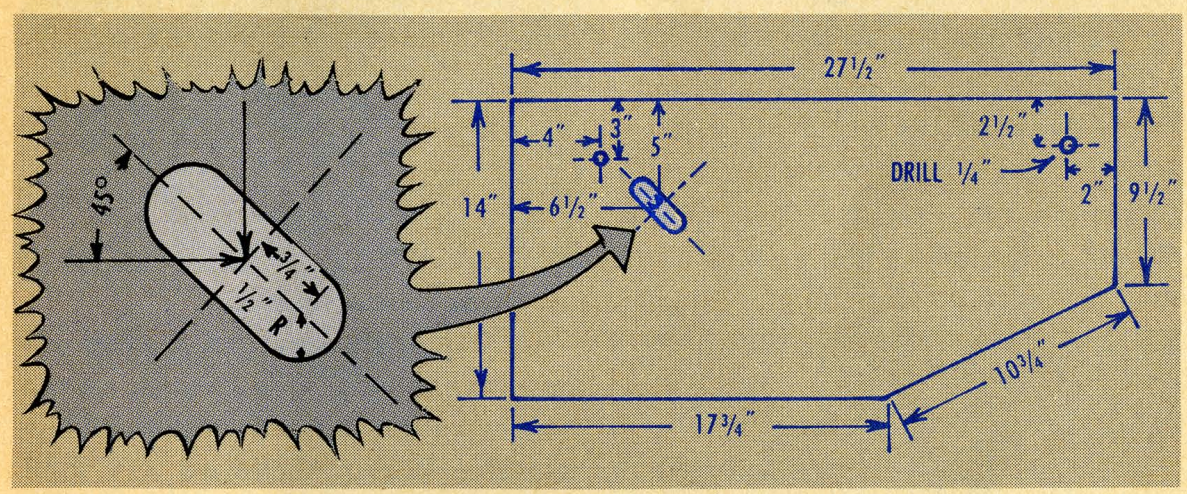
Dear Editor,

A battery that's wide open to all road mud, stones, water and other junk makes our jobs rougher and takes much more time than it should, especially when we could be doing other much-needed maintenance.




This was just about the size of it with the batteries of the 37-passenger Dodge bus. There're no mud-flaps on the bus to catch all the junk that's thrown back at the battery by the left-front tire. Which meant that the battery came in for one heckuva beating and messing.

So, we made a shield to protect the battery from mud so we don't have to take it out often to clean it. The shield is made from a piece of 27¾ x 14-in 16-gage steel.



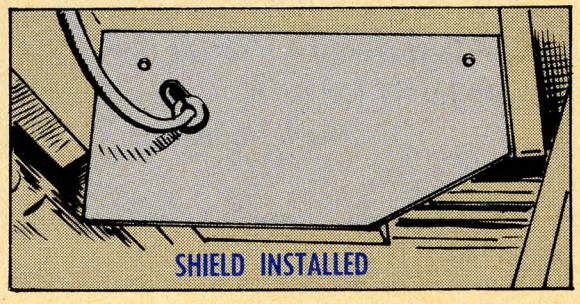

Other stuff you'll need to finish the job:

2 Bolts, ¼x¾, FSN 5306-018-7522.

2 Nuts, ¼ in, FSN 5310-022-5851.

Grommet, rubber: 11/16 in ID by 1 in OD, ⅜ in thk, 1/16 in wide mtg groove, split type, FSN 5325-098-3377.

To mount the shield, first make sure the ignition's off. Then, remove the battery ground cable—and then its positive cable. This can be done through the battery's access plates inside the bus. Drill two ¼-in holes—one in the overhanging crossmembers on each side of the



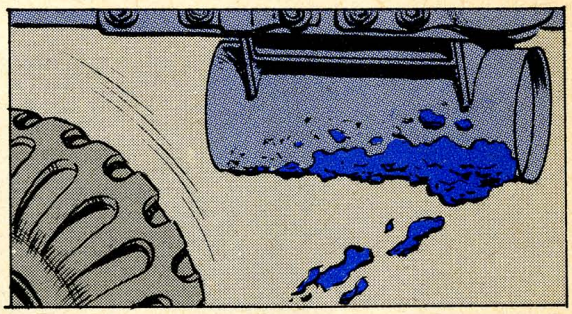
battery box. Ride the rubber grommet in the cable hole in the shield, and put the battery cable through it. Then, just bolt the shield to the crossmembers.

This shield makes it for certain that no battery-killing junk gets through.

**Ellwood W. Hagen**
**Fort Niagara, N. Y.**

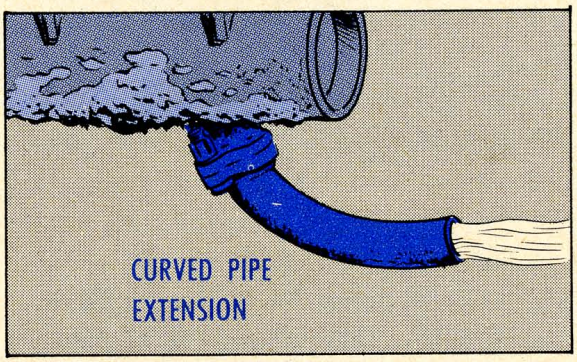
*(Ed Note—No doubt conditions in your area makes this gimmick worthwhile. It's almost for sure that your CO'll give you the OK, seeing that those batteries cost plenty of moolah.)*

## UNMUFFLE A MUFFLED MUFFLER



Dear Editor,

Driving our Mechanical Mule on muddy terrain, we noticed that mud comes flying off the wheel and finds its way into the exhaust of the muffler. In more than one case, the opening was shrunk to less than a half inch. We feel that a clogged muffler could eventually cause a burned-out engine.



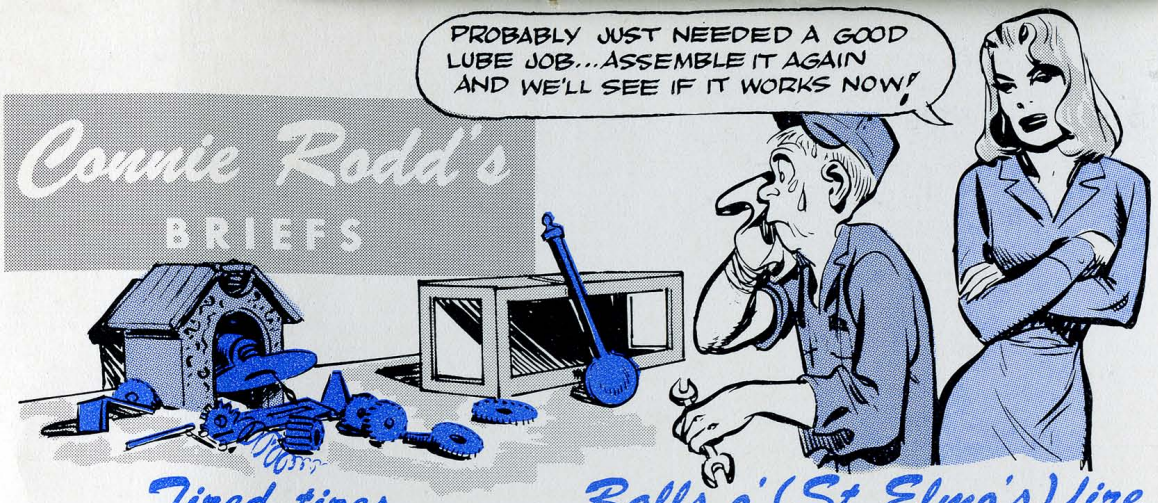

To remedy the situation, we had our unit mechanic rig up a six-inch curved pipe extension on to the exhaust. The extension curves backward so's mud can't find its way inside, and also so that the exhaust fumes won't backtrack toward the wheels or engine.

We used thin wall conduit pipe, having about a ¾-inch opening, put a curve in it and welded it to a homemade flange the same size and shape of the one already on the exhaust.

Nice thing about this flange is it's only bolted to the exhaust and does not become a permanent fix to the vehicle . . . it can be removed when it's not needed and used only for muddy cross-country operations.

**The 3 Muleteers, Charles Nickels, Charles Grove, Barney Thomas**
**Aberdeen Proving Ground, Md.**

*(Ed Note—Your extension will do until you're issued a redesigned muffler that won't clog.)*




# Connie Rodd's BRIEFS

## Tired tires

When you send in a UER on tires and tubes, give all the info—which wheel tire or tube was mounted on, number of plies or ply rating, fabric, new or recap, name of manufacturer, serial, code and date marking, estimated percentage of wear, and reason for failure.

## W(h)att now?

Havin' trouble keeping the section cabinets in the pits at your Nike-Ajax site dry? Try putting a 100-watt light bulb inside. It'll work wonders.

## Banish bad brakes

Bad brakes on gun motor carriages (M53 and M44-series) can ruin a man for life. Take that extra minute to check 'em weekly, like the LO says. The end result—safety—is worth the time it takes screwing off the plate under the driver's seat to get to the brake master cylinder. Keep it filled to ½ inch from the top, too.

## Balls o' (St Elmo's) fire

Your AN/ASA-3B static dischargers (FSN 5820-537-4839) for Army aircraft have been discharged from the Transportation Corps. From now on, they'll be eating fire for the Signal Corps—which'll be responsible for their installation and maintenance. Air Force Tech Order 12S1-2ASA3-2 gives you the maintenance dope until the Army manual comes out. It applies to the L23, L26 and U-1A.

## Warheads, be seated

Getting pretty damp down in your Nike-Ajax pits these days? After a big rain you're apt to have water on the floor, but don't let your warheads sit in puddles—never know what might happen. Instead, treat 'em like honored guests and give 'em the best seats in the house. In other words, make with the dunnage to keep your warheads high and dry.

## Got TM 9-2810?

Are you hurting for your copy of the new TM 9-2810 (Aug 58)? It's on "Preventive Maintenance Supply, Inspection, and Training Procedures — Tactical Motor Vehicle," and you might be without it just now because the initial distribution formula just carried it down to division level.

The word has gone out that the distribution of TM 9-2810 is being changed to include companies, battalions, regiments and the National Guard. If your outfit needs more copies, requisition 'em on a "need-to-know" basis, using para 41c of AR 310-1 as your authority.

ON-TIME MAINTENANCE
INSURES
ON-TIME PERFORMANCE
HAPPY NEW
OIL